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THE UNOFFICIAL GUIDE TO MEDICAL SCHOOL

Preface

If you are reading this book, chances are that you are considering becoming a physician. In order to achieve this, you need to get into medical school which is not an easy task to accomplish. There are many hoops one needs to jump through to achieve this, and it can be difficult to know what is needed to achieve this goal. The inspiration to write this book arose from the recognition that there is a lot of information on the journey to applying to medical school, most of which is not easily accessible. This is especially for individuals who cannot the connections or resources from friends, family or other contacts in medicine. The fundamental thesis of this book is: Mentorship should never come at a financial cost and should be available for all. This book is written in a manner to walk you through the steps necessary to get into medical school, including: 1) deciding if medicine is right for you, 2) what you need to do in your undergraduate studies, 3) what's needed for the application, and 4) what to consider when accepting an offer of admission. This book will not get you into medical school, but will instead provide you the information needed for you to get there on your own. You can think of this book like a map. Everyone starts from a different place, and in this book, we hope to guide you to where you want to be, regardless of where you currently are in your own journey. Each chapter is designed to describe a different stage in the process and to support you throughout your journey. The entire book is written through a collaboration of 70+ medical students from all 17 medical schools across Canada. This was done to mitigate bias and get multiple perspectives as we recognize that there is no one path to medicine. In order to best treat our communities, we need physicians from all sorts of backgrounds to best represent our population, and this book is written to help provide an equal opportunity to everyone. We hope to alleviate some of the barriers students face, so that your passion and drive for medicine is what dictates your future, instead of structural factors outside of your immediate control. Thank you for picking up this book. We hope it helps you and we wish you nothing but the best of luck on your journey. The only thing we ask in return is that you always pay it forward and provide mentorship, guidance, and advice for others.

Reza, Jason, and Semir

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Chapter

1

Why Medicine?



Chapter 1: Why Medicine

Medicine is a lifelong journey that begins from the time you decide you want to become a doctor. Deciding if medicine is right for you is a difficult task. Arguably it is the most difficult decision to be made throughout your entire journey and can function as a major source of your resilience throughout your journey to medical school, during medical school, and hopefully even after. Naturally, the goal of this chapter is to provide some insight on what medicine is about and provide some guidance so you can decide if it is the correct career path for you.

The first thing to recognize is what a physician really does. While it depends on the specialty you decide on, in general physicians are members of a healthcare team which focus on improving the health and quality of life of their patients and communities in which they serve. Physicians work closely with many other health professionals including, but not limited to, nurses, speech language pathologists, physiotherapists, dieticians, dentists, pharmacists, and many-many more. Contrary to the perception of many, physicians do not work alone and are not lone wolves. They collaborate with other health professionals and other physicians as part of a team. As a physician, you typically have a very broad knowledge base, you understand the whole clinical picture, and most of all, you have a position which affords you the ability to help advocate for what is best your patient.

The beauty of medicine as a career is that it is founded on improving the lives of others and assisting those in vulnerable situations. You have the opportunity to go to work every day knowing you are helping people in lifechanging ways and leaving a positive impact. Throughout your career you can maintain a sense of purpose which can help drive you through the tough times. Very few careers afford you this immense privilege. You also can never truly get bored of your job. Medicine is not and will never be static, it is everchanging and as a physician you are a lifelong learner. No matter how long you have been practicing for, you will always be responsible with learning from literature, colleagues, and your patients. There is always new research, new tests, new treatments, and new diseases. It never gets dull, because even outside of learning the medicine, you are learning from every patient you see bringing with them a story containing unique background and

experiences. As a physician you are also afforded the social capital to make a difference outside of a strictly clinical environment. You can advocate for greater social issues such as societal inequalities whether that be gender, race, or economic disparities. With an MD degree, and as a practicing physician, you are also privileged with a powerful platform which you can utilize to better the lives of others and the world as a whole. As a physician, you are also afforded a great deal of flexibility and the opportunities are endless. Wherever your interest may lie, you can find a way to incorporate them in your career. Medical and basic science research, devices and technology, private or governmental consulting, educating – these are just some avenues you can pursue with an MD. Chances are, if you have a passion, there are ways to connect them with medicine and incorporate them in your career. The sky really is the limit.

While medicine has many benefits, it is not an easy path and there are downsides as it is a lifelong journey filled with many hardships. You will encounter and learn to deal with death and dying, you will see tragedies, you will work long hours, you will be responsible for the health and well-being of others, and sometimes, it may feel like you are alone. There is also a lot of uncertainty in medicine beginning from the day you decide it is the career right for you. You do not know when and if you will get into medical school and including where you will study. Once you are in medical school, you do not know until you match a residency position what type of physician you will be and where you will be doing your training. Even then you will not know what subspecialty you will pursue if that is where your interests lie, and when and where you will get hired as a staff physician. It will be expensive, and you can be left with a large amount of debt which you may seem impossible to pay off, leading to increased financial stress on the people. The constant uncertainty and long hours can also make it difficult to maintain relationships and start a family. There will be a lot of personal sacrifice and hardship, but if you are in it for the right reasons and you truly are passionate about it, they pursuing medicine will be worthwhile and we are confident that you will be able to persevere through the challenges you will be faced with.

For this reason, before you decide medicine is right for you, there needs to be a lot of self-reflection. You need to think to yourself about what kind of career you would like to have and if

medicine is something you are truly passionate about. If you are in it for the money or the prestige and nothing else, then you may find easier careers to achieve such objectives. This is because the process is not short and is very taxing. If there is not an underlying passion driving you, it might be easier to burnout or feel miserable. While the process in applying to medicine is long and filled with challenges, you should not be miserable throughout it.

From the day you are trying to get into medical school until you graduate your final stage of training, you should be enjoying the process. While you will have ups and downs, if you are in medicine for the right reasons, studying for your exams will be less like studying, the years on end of school will feel less like school, and the early mornings, late nights and overnight shifts will be less grueling because it is where you will want to be and you couldn't see yourself anywhere else.

Keeping with this, from the day you want to pursue medicine to your final stages of medical school, we feel as if you should expect to enjoy the journey. While you may experience ups and downs, remember why you will reflect on why you decided to pursue medicine and from that you may feel that studying for exams become less arduous; spending years in school may feel less like school; and regardless of early mornings, late nights, and overnight work may be less grueling. But holding on to the reasons why you are in medicine should help you through. Back to your applications, you may not be happy with the application process for medicine, but you should hate it, it is a chance for self-reflection and uncovering your passion for medicine.

There is no clear-cut method to determine if medicine is right for you, if there was, we would share it with you. It requires a lot of self-awareness, self-reflection, time, and luck. Some suggestions include connecting with medical students, residents, fellows, physicians, and asking about their path to medicine. Ask what motivated them to pursue medicine, what is currently motivating them now, what they like most about their career, and what they like the least about it. In addition, explore other career options and see if you can see yourself happy elsewhere. Consider your motivations towards medicine as a career. What are they and can any of them can be fulfilled elsewhere or if there is an intrinsic desire toward medicine? Is there a constant gravitation towards

medicine and do you feel like if you did not pursue medicine you would always look back wishing you had? There are many questions to ask yourself, but most of all what is needed is time. Sometimes, it can feel like there is a rush on deciding if medicine is right for you so you can start “gunning” for it early by preparing your application and getting in as soon as possible. Take a deep breath and recognize that there is no rush. The pursuit of medicine is a marathon not a sprint. Take the time you need. Ensure medicine is the correct path for you; this is the best service you can do for yourself. In the tough times you can remember your initial motivations for choosing medicine to help push you forward and you are less likely to regret your choice down the road if you sufficiently reflect on it early.

You have what it takes to be a doctor. You do not need to have immediate or distant family in medicine to be a doctor. You do not need to be wealthy or belong to a certain socioeconomic background to be a doctor. You do not need to be any specific race or ethnic group to be a doctor. You do not need to identify as any particular gender to be a doctor. If you want to be a doctor, and you are willing to work for it and do what it takes, you can do it. Do not forget that there will be challenges, and for some, the barriers will be steeper than for others. It might feel impossible at times, but you need to remember that if you truly want it and are willing to put the work in, you can achieve your goal. Life is not fair, but do not become a victim of circumstance, work to set your own future. All three of the editors in-chief of this book are the first individuals in their immediate family to enter medical school and to eventually become physicians. We did not have family to look to for mentorship or to provide us connections or contacts to help us out. What we did have through it all, and continue to carry with us, is passion. Passion for what medicine is, passion for wanting to help others, and passion to become physicians. This passion is what drives all of us, and we got into medical school through our hard work and determination. None of us are geniuses or superhuman, and what we achieved you can as well. This book will not get you into medical school. It will provide you the insight on what is needed to get into medical school and provide you the tools for you to pave your way and achieve your goals. Once you have decided medicine is right for you, your journey has begun. It will be scary and there will be times where you doubt yourself. Remember to trust yourself, work hard, and you can truly achieve anything.

Chapter

2

Introduction

If you are reading this, it means you're contemplating pursuing a career in medicine. We want to first congratulate you on making that decision for yourself! Thinking about your future can always lead to some feelings of stress and anxiety. Accessing this guide is an amazing first step towards actualizing your goal of becoming a future physician.

Chapter 2: Introduction

If you have not heard this yet, just know that there are already a group of students rooting for you! A large group of medical students from across Canada have contributed to the creation of this guide, with the hopes of providing you with ample support on your own path to medicine. The advice provided within the guide is aimed to raise awareness of the components that we believe are important to consider when applying to medicine. Having said that, the advice we are giving is NOT set in stone. At the end of the day, we encourage you to pursue experiences that are enjoyable for YOU, even if they are not listed in the guide.

Before diving deeper, it is also very important to note that each individual admitted into medicine had their own unique journey. That will become apparent to you as you explore the different pathways to medicine laid out in this chapter. In fact, a large proportion of medical students follow unconventional routes and may not even have intensive human biology backgrounds. So while reading through, please remember that there is not one path that is greater than another.

Chapter 3: Undergrad

In this chapter you will learn about different undergraduate programs. The schools' benefits and shortcomings will be discussed, as well as things that you should consider when choosing a school such as location, cost, support networks and environment. There will also be a discussion on program selection, course selection and summer school. Of course, the discussion on undergraduate education would not be complete without a section GPA. You will become familiar with the OMSAS GPA system and how it corresponds with the GPA grading systems of the different universities. Overall, this chapter will give you an understanding of the undergraduate system and some factors to consider when choosing the school to attend as well as key insights into the undergraduate academics.

Chapter 4: Research & Extracurriculars

Extracurricular activities are an integral part of the application for many medical schools in Canada. This chapter will guide you in choosing your extracurricular involvements and dispel, some common myths surrounding extracurriculars. It will include advice on how to document your experiences, both objectively (tracking time) and subjectively (memorable moments), which is critical for the application and interview. Extracurriculars can seem like a daunting part of the process and there may be some confusion around what to do and what not to do. This chapter aims to provide insight and make the process of choosing which extracurriculars to be involved in much simpler.

Chapter 5: MCAT

This chapter will be covering all kinds of advice when it comes to tackling the MCAT. In this chapter, we will be discussing: the overall breakdown of the MCAT by sections, recommended resources that some students have used to prepare for the test, some classes in undergrad that will help in preparation for the MCAT, the truth about prep companies, and when to consider writing the MCAT.

Chapter 6: Applying

Now that you have completed all the prerequisites, the next step is to finally apply to medical school! This chapter explores the whole process of figuring out the right schools for you and all the factors to take into account to preparing your application. It provides you with the tips and tricks to put together an application that showcases your expertise in the best light to that various reviewers that will look at it.

Chapter 7: MD-PhD

This chapter will provide insight for those looking to combine their passions for Academia and Medicine in the pursuit of a MD/PhD degree. Before committing oneself to any path, especially this one, it is necessary to weigh the advantages and disadvantages of combining a PhD degree with your MD against choosing to complete a PhD before or after medical school. In addition, this chapter will inform you of the specific details regarding the process of applying for the MD/PhD stream including key fixtures such as your personal statement, interviews, etc. There are also prevalent misconceptions that are addressed in order to give you the perspective you may need to definitively decide whether this is the right choice for you or not.

Chapter 8: Interviewing

The interview process can be a daunting experience but is also an exciting opportunity to display your strengths as a future medical student. This chapter will give you an overview of the various types of interview formats, and how you can prepare for them. It will explore how to practice in advance and up to the night before and discuss how to confidently and professionally present yourself. Specifically, this chapter will cover how to dress, communication skills, and where to stay during your interview.

Chapter 9: Accepting Your Offer

In your path to a career in Medicine, there will be many big milestones with one of the biggest being your acceptance into Medical School! Your emotions may overwhelm you on this fateful day, and rightfully so. But, do not forget you have to actually accept your offer in order to say you're officially a Medical student! This chapter will outline the steps to do just that as well as provide a framework with which to potentially decide which school is the best if you have received

multiple offers. Keeping mind that this journey is a marathon and not a sprint, this chapter will give insight on how to navigate through the potential reality of being waitlisted or rejected.

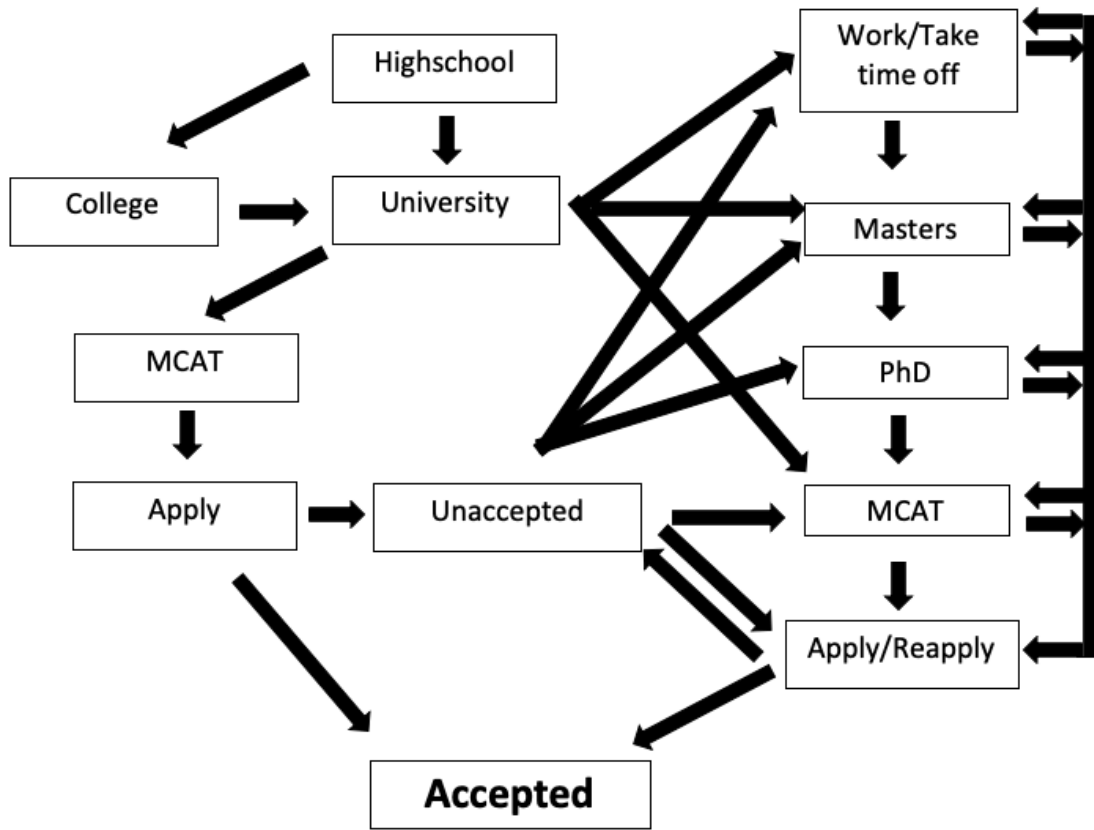
Chapter 10: Wellness in the Process

Wellness in the process of applying to medical school is an important topic that is not discussed enough. This chapter will explore the ways in which you can maintain wellness in life as you go through this stressful time. Specifically, this chapter will discuss how you can practice mindfulness, keep up your hobbies/interests, and maintain healthy relationships during the application cycle.

Chapter 11: You didn't get in, Now What?

This chapter will be discussing the steps some of us have taken after receiving a rejection from medical school applications. Some key points in this chapter includes: the immediate reassessment period - should you try again immediately, take a break, or pursue an alternative route, reflecting on your application +/- your interview, review some potential weakness and areas of improvement, and how to make the most out of the time you have before potentially applying again.

There are infinite paths to Medical School



Chapter

3

Undergrad

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Chapter 3: Applying to undergrad

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The choice of an undergraduate degree can be a daunting one. There are many schools and within those schools, many programs. It is important to use all the information at your disposal to make the best choice for you, hopefully one that will set you up for success. The purpose of this section is not to tell you exactly which programs to apply to but to give you a framework that you can use to make your decision.

Does your school matter?

The quick answer is no. As long as your university is accredited, medical schools in Canada will treat them equally. Going to a school with a medical school does not necessarily increase your chances of getting in. However, there may be more opportunities to meet physicians, medical students and to engage in clinical research. Ultimately, it is more important for you to choose a school that you will be happy and successful at and that you can see yourself being a part of for many years.

Some important considerations:

- Location
 - Do you want to be closer to home?
 - Do you want to commute from home?
 - Do you want to live in a big city vs. a small town?
 - If I am planning on or near campus, how much will that cost?
 - Is this city/town culturally diverse and how might that impact me?
- Social/Financial support
 - What type of support is available to undergraduate students?

- Is there adequate financial support (bursaries, scholarships etc.)?
- What is the typical cost of living in the city (ex: Toronto vs Kingston)?
- Student life
 - What is the school culture like?
 - Is the community welcoming?
 - Are current students satisfied with their experience?
- Academic life
 - What if I am interested in research? Are there many opportunities?
 - What is the grading reputation like? Do current students feel like they are fairly graded?

Each university's website will have a great deal of information regarding the categories listed here, so they are a great resource for getting an idea of what the school has to offer. If you have any friends, family members or upper years from school who attend a university you are interested in, try and reach out to them and ask them about their experience. These people can give you a practical look at how life would be at that school, which can help you decide whether you can picture yourself staying there. Lastly, there are also websites that rank Canadian universities based on various criteria, such as student satisfaction, school size, research opportunities etc. These can show you the strengths and weaknesses of the various schools and give you an idea of how they compare with each other. However, it is important to realize that a school's ranking on a list may not predict how positive your experience will be there. You need to decide what factors are important to you and make your decision based on that.

Does your degree matter?

Similar to choosing a school, it is important to know that there isn't one premed program in Canada that increases your chances of getting into medical school. It is much more important for you to choose a program that you enjoy and that you can be successful in. Some popular degree programs include:

- Biology

- Biomedical science
- Life science
- Medical science
- Health science
- Kinesiology
- Neuroscience/psychology

This is not an exhaustive list by any means, but it might give you some insight into the common programs that pre-med students choose. As you can probably already tell, many of these programs are very biological science focused as these programs tend to provide you with all the prerequisites you need for medical school. Some students have other interests and choose to pursue other fields, such as engineering or humanities, but they must ensure that they are able to take the prerequisites for medical school. Here are some important questions to consider when making the choice:

1. Does this program allow me to take courses that will be prerequisites for medical school? For example, many medical schools require 1 full year of chemistry, 1-2 full years of biology, 1 full of year humanities etc. It is also important to consider whether you will be able to take courses that prepare you for content that is tested in the MCAT (more on that later), such as physics, chemistry, biochemistry, psychology and sociology.
2. How do I like to be tested? For example, many biological science programs use a predominantly multiple-choice format for testing, while humanities programs may prefer an essay format. Which one do you like better and which one allows you to perform better?
3. Will I be able to take courses that I am genuinely interested in? Contrary to popular belief, you do not need a BSc. degree to apply to medical school, so you can choose any degree you like. If for example you enjoy learning about psychology and you feel like you would be successful in it, a B.A. in psychology might be just the way to go!

4. What are the class sizes like? Am I someone who learns better in smaller classes where I feel comfortable asking questions and connecting with my professor? Or do I prefer large classes where I can blend in with the crowd?

Once you have decided on programs/schools to apply to, it can be difficult to make that final decision about where you would like to go. Here is a sample table that you can use to make that decision:

	Pros	Cons
University of Guelph	<ul style="list-style-type: none"> -Small town feel -Human anatomy program -Lots of undergrad supports -Smaller student body -High student satisfaction 	<ul style="list-style-type: none"> -Town might be too small -Less cultural diversity -No private bathrooms -Less medical presence
University of British Columbia

Takeaways

Ultimately, it is important that you choose a school and a program that will set you up for success and that is ideal for your own unique educational wants and needs.

Planning out undergrad

In the previous section, many tips were provided on selecting a school and undergrad program for you to pursue. An important point to emphasize from there is to choose something that you are truly interested in. This goes not only for the undergrad program as a whole but also for the

mandatory and elective courses you choose to take throughout your education. Choosing courses that you are interested in will allow you to direct your schooling in the way that you want while keeping you motivated and engaged in your education. This will change your educational experience and make school more of an enjoyable experience rather than a chore or hurdle that needs to be overcome before you can achieve your goal of becoming a doctor.

Another reason why it is important to choose an undergraduate degree and courses that you are interested in, is because it is a part of parallel planning for your future. The journey to medicine can be a long route and oftentimes priorities and goals change leading people to pursue other careers and opportunities. If this does happen it is important to be in a position where you can utilize your education to help achieve your new goal. You do not want to be caught in a position where you are left with a partially completed degree in a field that you are not fully interested in because you no longer want to pursue medicine. This is a costly mistake that commonly happens. This is where parallel planning makes a big difference. If you choose to pursue a degree you like and have an alternative plan for your education, it helps mitigate the risk of changing career paths during school and places you in a position where you have more control over your career trajectory.

Once you finalize your school and program, it is important to recognize and stay on top of your undergraduate program map and the needed prerequisites to apply to the medical schools of your choice. Every medical school has their own requirements that are needed to apply. By knowing what schools you want to apply to, and their specific requirements you can plan your undergraduate degree to adequately fulfill the requirements in the most convenient manner for you. It is also good to check often for changes because medical school requirements update frequently and you want to ensure you're up to date and ready when application time comes by.

It is also important to recognize that every undergraduate program has a program map with minimum requirements that need to be met to graduate. These requirements vary from program to program and will ultimately direct what you can take during your education. Familiarizing

yourself with this will allow you to plan your courses in a way that's optimal for you to do well. For instance, if you know that a particular year or semester is going to be difficult due to the mandatory courses that need to be taken during that block, you can try and schedule easier electives during that time to lessen your workload. Or do the opposite and schedule harder electives during an easier block. This is beneficial when trying to fulfill the prerequisites that are needed to apply to medical school, especially if your undergraduate program does not cover all of the prerequisites that you need in the normal program map.

Creating a program map for yourself or planning out your undergraduate schedule can be a daunting task to even the best of us. Our advice on this is to reach out to program counselors/guidance counselors as they can be a great resource. They can advise you on what courses to take and will also be able to answer any questions you might have in regard to meeting your degree requirements. An alternative to this is to speak to upper year students as they can also provide you with tips and guidance on planning out your undergraduate degree. They might also be willing to provide you feedback on courses and direct you to resources that might have helped them when they were in your position. At the end of the day, it is good to remember that having a plan for your undergraduate degree will help keep you in the right direction, but don't stress or place too much emphasis on a strict plan. It is better to keep an open mind and be able to adapt as you go through your education. And most importantly, try your hardest, make the best of your education, and don't forget to have fun along the way.

Summers and Summer Courses:

A common question is how does one maximize their summer for their benefit? and the real answer is that it depends. Summers to some students can be an amazing time to relax and refocus their mind in-between school. While for others an opportunity to do research or get ahead of their curriculum through summer school. Speaking from experience there is no one correct way to spend your summers, but below are some common activities student seek out.

Work:

Working in the summer is a great opportunity for you to make some money on the side while also not feeling like you are completely “wasting” your summer. You are going to be in school for a long time so some money on the side is extremely helpful. In addition, the skills and experience one gains from working is invaluable and can really help define your personality. For example, a normal retail job can help you gain important interpersonal skills, hone your team working capabilities, and even learn how to deal with challenging situations or bosses. Moreover holding a more conventional job does also add value to your application as it can be viewed as an additional extracurricular activity.

Research:

One might wonder how every premed seems to have research on their resume in addition to countless other extracurriculars, and the secret most of the time is by utilizing the summer. Although it is not necessary, it is generally recommended that a student has some research experience when applying to medical school, so seeking out these opportunities are important. For the most part, landing a research position can be challenging and depending on the position could require some previous lab experience, which students really only get after a few years in school. This is why many students seek out research opportunities in the second half of their undergrad. Research opportunities many times are unpaid, but there are instances where the supervisor can pay you or you can apply under a grant such as NSERC USRA or other school specific programs.

Extracurriculars/volunteering:

Summers are really yours for the making, so if there is a particular activity or because you are passionate this can be your opportunity to indulge yourself. It is common to see premed students in the hospitals over the summers volunteering, but don't feel obligated to only seek out medically

related activities. Remember that it will always be more worthwhile if you spend time doing something you are passionate about, so stay true to yourself.

Summer school:

Summer school is another option for students looking for activities to maximize their summers. This can be a great opportunity for students in non-traditional undergraduate degrees to fulfill prerequisite requirements for medical schools. This can also be an opportunity for students to complete their “harder” courses since you can focus your efforts towards this single course. In addition, some medical schools do not include these grades in their overall GPA. So if you do want to use summer school for GPA purposes always reconfirm with institutions how they consider these courses. When contemplating summer courses always consider whether you are comfortable spending your summers which are traditionally your rest periods on more school.

MCAT:

There is a whole section dedicated to the MCAT, so please look there for additional information but generally summers are the time student study and write the MCAT. For planning purposes, it is generally advised to write the MCAT soon after one has completed biochemistry and organic chemistry which is typically after second year of a traditional pre-med science undergraduate degree. This provides the opportunity to rewrite during the summer of third year if needed, and also allows one to apply to medical school a year earlier for some schools, but keep in mind the “best” timing is individual and dependent on a multitude of factors, so there is no one hard rule.

Personal Growth:

As mentioned earlier, don't be shy to use this time for yourself. If you feel the need to take this time off because you had an extremely stressful semester or if you just need a break, the summer is your opportunity to do so. So, feel free to travel if you have the means to, or spend time locally by picking up a new hobby, the world really is your oyster.

Also keep in mind that you can definitely do a few of these activities over the same summer. All in all, how you spend your summers will ultimately depend on you and how much you would like to do, but always put yourself first and only take on as much as you can handle. There is no reason for you to burn yourself out, remember that getting into medical school is a marathon not a sprint.

During undergrad:

Stress is inevitable, and it comes in many forms— too many essays, a failed course, a bad relationship, family issues, financial hardship, etc. It may be a singular occurrence or a constant, pervasive factor that permeates your everyday life. While coping with stress does not guarantee a spot in medical school, it helps you deal with the various obstacles that arise on your journey, and ultimately develops your resilience and personality. Stress management is a tool you will carry with you into medical school and the rest of your career.

Stress management techniques come in a variety of different flavours, and though it is important to have a strategy, remember that poor strategies can be just as detrimental as no strategies. Impulsive purchases, weekend “benders”, neglecting responsibilities, self-punishment and excessive binge-eating are examples of strategies that are ineffective for some individuals, but may be surprisingly successful for some others. . Needless to say, there is no single way to properly handle stress, and it takes some self-discovery/reflection to figure out how you best deal with stressors. Constructive strategies take advantage of time management, social interaction, intellectual stimulation, physical activity and other beneficial traits. For some it may be as simple as going for a walk or going for coffee with a friend, while for others it requires more intensive approaches of a professional or academic leave of absence. The simple act of saying “no” is very powerful and, though it often feels like we are letting someone else down, the freedom of mind it brings is incredible. Remember, no sacrifice is too great when it comes to your mental health.

One more quick tip is to surround yourself with a good peer group. Find like-minded individuals that are focused, trustworthy, helpful, and fun. Whatever it is you choose to do, the peers around you shape your personality, your environment, and your future. So choose who you surround yourself with wisely.

Let's face it, undergrad is busy, and when you're trying to get into medical school there isn't much time to slack off. You have a full course load, you're an executive of 5 committees, you volunteer several hours a week, and you might even work on the side. It's easy to forget about yourself and ignore your mental health amidst all your obligations. However, part of managing stress is to never forget the importance of your wellbeing. One thing is certain, taking time for yourself is distinct from slacking off. There is an entire chapter on wellness coming up that builds upon this foundation, but to sum things up, maintain your passions, keep your hobbies, and continue to do the things you love. Whether it's making music, reading books, binging Netflix, or waking up at 5 am to go rowing. These are the things that inspire and motivate you when you're burnt out, and they keep you unique, and grounded.

Now let's talk about grades. They are important since nearly all medical schools in Canada weigh your GPA as part of the admissions criteria. Earlier we spoke about career planning and choosing an undergrad in something you are interested in. Among the other reasons listed, doing something you enjoy boosts your motivation to do well academically. GPA is often composed of assignments, mid-term exams, and final assessments. Occasionally, attendance is also contributory, so get those easy marks by showing up to class! Turn in your assignments on time, and be sure to attend all tutorial or lab sessions if your course has them. Exams are daunting, but set yourself up to do well in them. Go to class prepared to take notes or ask questions, listen to any pre-recorded lectures, and do any additional or recommended readings to augment your learning. Develop good study habits, and focus on concepts you are weak in so that you reduce gaps in your knowledge. Finally, find an exam routine that works for you and stick to it, whether it is cramming the night before because you work best under pressure, or taking the prior evening off to get a good night sleep. Always show up to your exam early, with whatever tools you need (pencil, paper, calculator,

granola bar if allowed etc), and give it your best shot. Be confident that you have done your best to get all your grades up. Even if your overall GPA isn't what you expected, there are opportunities through the admissions process to make up for your grades with extracurriculars, essays or more.

In addition to academics, the undergraduate experience is also about self-discovery and growth. Growth outside of academic success is critical beyond medical school applications, as it is crucial to becoming a well-rounded physician and human being. With that being said, Medical schools also like to see a balance between academics on applications because it shows individuality. More than this, if interests change, future employers seek individuals with supplemented skill sets, increasing the marketability of students that acquire skills outside of academia within the job market. Specifically, participation in extracurricular activities and leadership roles in these activities are positively linked to obtaining one's first job and later career advancements. Extracurricular activities provide opportunities for students to explore their passions and to discover things which interest them beyond academics. Although this book contains a chapter dedicated to extracurricular activities, this chapter will briefly touch on this subject highlighting the significance of self-growth during the undergraduate or pre-medical journey.

On top of providing productive breaks, which play a beneficial role in academics, extracurricular activities allow students to gain and improve skills including but not limited to goal setting, teamwork, time management, problem solving, analytical thinking, leadership, and public speaking. Extracurricular activities provide a setting to become involved and to interact with other students, thus leading to increased learning and enhanced development. Specifically, a student's peer group is the most important source of influence on a student's academic and personal development. By working together with other individuals, students learn to negotiate, communicate, manage conflict, and lead others. Taking part in these out-of-the-classroom activities helps students to understand the importance of critical thinking skills, time management, and academic or intellectual competence. Involvement in activities helps students mature socially by providing a setting for student interaction, relationship formation, and discussion. Working

outside of the classroom with diverse groups of individuals allows for students to gain more self-confidence, autonomy, and appreciation for others' differences and similarities.

There are a variety of activities to pursue such as student government, academic clubs, internships, cultural groups, community service, athletics or even part-time jobs. However, the best way to develop the aforementioned skills and experiences critical to turning students into well-rounded individuals is to consider the activities you enjoy.

Chapter

4

Extracurriculars & Research

Extracurricular activities are an integral part of the application for many medical schools in Canada. This chapter will guide you in choosing your extracurricular involvements and dispel some common myths surrounding extracurriculars. It will include advice on how to document your experiences, both objectively (tracking time) and subjectively (memorable moments), which is critical for the application and interview. Extracurriculars can seem like a daunting part of the process and there may be some confusion around what to do and what not to do. This chapter aims to provide insight and make the process of choosing which extracurriculars to be involved in much simpler.

Chapter 4 - Extracurriculars & Research

Contributors: Lina Elfaki, Maryam Bagherzadeh, Sarah Khan, Josh Desmond Nash, Ibrahim Sadiq, Geoffrey Sem, and Matthew Sem

The extracurricular component of your application is not only an excellent opportunity to demonstrate your personality and interests, but also a great way to showcase yourself as a well-rounded medical school candidate. Many of you are likely aware of what your interests already are, but for those just beginning to explore, it is important to cast a wide net. Explore many low-commitment opportunities early in your post-secondary education and strengthen your engagement and commitment over time as you become more interested.

It is important to choose your most significant extracurricular experiences for your application; quality is greater than quantity. The value of your engagements are measured not by the number of them which you are involved in, but by the level of your commitment, and by the impact of the experience on your life. Furthermore, the Royal College of Physicians and Surgeons highlights seven roles that all Canadian medical graduates should be competent in to adequately provide care to the populations they serve. These attributes include: Professional, Communicator, Scholar, Collaborator, Health Advocate, Leader, and Medical Expert; six of which can be developed before the start of your medical education. When including your activities, try to exhibit some of these competencies, but by no means do you need to have experience in all of these areas to have a strong application.



There are various extracurricular activities that one can pursue and that can be included in your application and there is no specific path one must follow in these pursuits. Above all, we advise that personal interest be your guiding principle in selecting the activities you dedicate your time to; do not select an activity because you think it will get you into medical school. The extracurricular component of the application is often discussed during the interview stage, so be prepared to discuss any of the experiences you write about in your application in greater detail. Below are some examples of activities that can be included on your application, however experiences not listed here can also be included. Remember, this component is an opportunity to showcase YOU and your passions; there is no mould to fit into but your own!

Extracurriculars

There is a lot of flexibility when it comes to selecting extracurricular activities. An extracurricular activity refers to any activity outside the classroom or studying setting, which can include but are definitely not limited to any of the following: sports and athletics, dance, musical interests, artistic

talents, hobbies, religious groups, clinical experiences such as shadowing, or student groups. We strongly recommend for you to diversify your extracurricular experiences as much as possible, while keeping in mind not to get involved in too many extracurricular activities.

As with many other non-academic activities such as volunteering or research, longer-term commitments (e.g. years versus months), are key and demonstrate your responsibility and dependability. Furthermore, longitudinal experiences offer you the ability to grow, expand your passions, and step outside of your comfort zone – which also helps pave the way towards building your leadership skills. Remember: there will often be more opportunities available to you than you have time for. This is why it is important to check in with yourself every week or month, to reflect on whether you are taking on too many commitments, and to have the courage to turn down opportunities when necessary. Time management is a vital skill to being a good physician, so dedicate your time wisely towards your extracurricular activities.

The choice of the extracurricular activities themselves is not as important as the lessons, maturity, interpersonal skills and personal growth that you will gain from interacting with diverse people in diverse settings through your extracurriculars. Whether it be the conflicts you helped mediate as part of your school's basketball intramural team or the mentorship challenges you navigated when tutoring marginalized youth in your community, by actively partaking in extracurricular activities you will grow from the many valuable lessons and learn from the various narratives shared with you. These passions, stories, and teachings will also greatly assist you at the later stages of the admissions process, such as during the interview stage when you may be asked to discuss your involvement in extracurricular activities or talk about a valuable lesson learned through an extracurricular experience.

Most importantly, be yourself and align your extracurricular activities with your personal goals and passions!

Volunteer Work

Volunteering is an invaluable experience to have not just for applications, but for your own life as well. It is an opportunity to explore different interests, gain new perspectives, and to reaffirm your calling to medicine. In addition, it is a unique chance to develop and hone the softer skills that inherently come with volunteering such as empathy, teamwork, or therapeutic communication. Your volunteer activities should reflect your unique passions and interests - try not to pursue volunteer roles simply for the potential acclaim and recognition. This is especially important because it is highly recommended for volunteer activities to be long-term (generally at least 6 months) which helps demonstrate dedication and commitment, important qualities for a future physician. This can be quite tough, considering volunteering is an unpaid role, on top of the demands of extracurriculars, employment, obtaining a high GPA, and other life responsibilities. Hence, time is of the essence, so commit to causes/activities that you personally feel engaged in and passionate for, but also remember not to overextend yourself.

While volunteering in a healthcare environment (hospital, clinic, long-term care home, etc.) can be helpful for career exploration and an excellent learning experience, it is NOT necessary for an application or acceptance to a Canadian medical school. The same applies for international and overseas volunteer/medical work. These are certainly valuable experiences but should be completed only if you have the time, resources, and most importantly, the desire to contribute to those specific causes. Furthermore, the opportunity to travel abroad for volunteer work is a privilege that not every student may have access to, which is also recognized by medical school admission committees. International volunteerism may not be for everyone and can have repercussions if the right intentions aren't there. Remember, authenticity matters. A volunteer experience abroad and a domestic volunteer experience are evaluated in the same manner - based on what you as the applicant has made of it. The time and effort you dedicated to a volunteer role you are passionate about will shine brightly in an essay or interview regardless if it is clearly for a cause that is true to you.

Research

First, it is important to note that just like every other non-academic activity, having a research background is not an absolute requirement for getting into medical school. Conducting scientific research is not for everyone and the number of hours you have spent doing research, or the number of labs that you have participated in do not correlate with your success in getting an admission to medical school. However, having a research background can demonstrate important skills, such as scientific literacy, contributing important knowledge to a field and critical thinking. As such, it may be of importance to explore research in one form or another during your pre-medical years.

The type of research conducted prior to medical school is not of importance. One research project is not superior to another, nor is the institution that it was completed in. You may conduct your project in a basic science lab or get involved with clinical research. You can work in a wet lab or a dry lab, and that can be done in an academic institution or a hospital. Your research can be in any academic field - it does not have to be related to healthcare or even science in any way. Furthermore, your role as a researcher can be as a volunteer student in a lab, or as a summer student in the university where you are pursuing a bachelor's degree. It can also take shape as part of your thesis for your undergraduate degree. If you find research to be of interest, you may want to pursue a thesis-based Masters or PhD to increase your research experience. Again, none of these are a requirement of any sort for getting into medical school.

It is important to also note that your productivity and efficiency in your research role will be of highest significance. That does not go to say that you need multiple publications or poster presentations. In fact, none of these are a requirement. However, it is worthy to commit to a research project that provides you the opportunity to conduct productive and high impact work. That can take shape in a form of an abstract publication, a presentation, a grant, or a journal publication. However, if none of those are granted, it is important to remember that the skills that you gain from conducting research is important in and of itself. Research is also a great way to

meet like-minded people and find mentors and friends who can help you in your path to medical school. It is also a great environment to strive for continuous progression and self-improvement.

Leadership

Is it more important to build extracurricular activities around pre-defined leadership roles, or to extract leadership roles from activities and interests in line with one's passions? Though most would agree the latter seems more sensible, what often ends up happening is the former. Many applicants feel pressure to conform to "model" leadership, gauging their own capabilities against unrealistic peer achievements or abstract descriptions of leadership loosely defined by CanMEDS and other professional organizations. Often being a leader is hastily equated with "being in charge," e.g. being a club president or team leader. However, an applicant who pursues a role that genuinely excites them without catering to industry or professional standards, in our view, immensely raises the richness and validity of their experiences. Almost every meaningful extracurricular activity can provide lessons on and opportunities to gauge leadership. For example, an applicant might speak on his or her experience as a general member of an extracurricular club, perhaps how they adapted to a sudden change, came up with a creative solution, or presented data in an unconventional way. If properly conveyed to a committee, any of these could count as unique yet relevant leadership experiences despite the lack of any formal sounding leadership titles, or managerial or design initiatives. Reflecting on truly meaningful experiences will allow any applicant to convey leadership qualities enthusiastically and convincingly.

Employment

The employment section of your medical application is a key opportunity to present and emphasize your unique individual attributes and skills. The value of any individual job entry on your application should be based on what you learned from the job while also highlighting any individual experiences that translated into new skills - not the job itself. Medical school applications usually have a section for you to elaborate on any meaningful experiences, such as

the personal statement/essay, which can also be an opportunity to further discuss the significance of any work experience(s).

Depending on the application, there may be a maximum limit on the number of entries you can make under employment. Like extracurricular activities, quality is greater than quantity. You should consider how any work experience relates to your individual interests, goals, and global impression of your application and how it represents you. Many students for various reasons may not have the opportunity to work in a clinical setting prior to medical school, nor is it required or expected. There is the opportunity to usually engage in clinical environments through shadowing and volunteer positions throughout undergrad if you are interested. Consistency is one of the most important factors of any employment entry as it shows dedication, commitment, and maturity. Depending on the nature of the position, you can identify various levels of commitment even within one job - whether it be a commitment to advocacy, marginalized communities, curiosity, research, or self-improvement, to list a few.

Within each job position, is also the opportunity to gain a letter of reference from an employer to help support your application. Although letters of reference are highlighted in another section, it is worth noting that employers can make excellent letters of reference especially if you have worked with them for a longer period of time and they have been able to evaluate your abilities directly. Additionally, your employer may be able help you identify individual skills you have acquired during your time in your position. On the other hand, it can also help you eliminate asking them for a reference letter if they seem hesitant or unsupportive of you pursuing medicine. Whether or not to engage in a discussion regarding your medical aspirations should be based on your own comfort level.

As mentioned, it is less important to focus on the particular job, but to let Admissions Committees know how this position has impacted you and you should be able to demonstrate a level of deeper insight into the position beyond the individual job requirements. Most importantly, you should be able to describe why you were committed to the particular job/organization, what individual skills

you acquired (and list them), and be able to relate them to any meaningful experiences. There is no magical job that will get you into medical school (as far as we know). Ultimately, you should allow yourself to be guided by your passions, and interests.

The employment section is unique relative to extracurricular activities or volunteering in the sense that sometimes working while pursuing medicine is non-optional. Maintaining an acceptable GPA average for applying to medical school should always remain goal #1. Without meeting the GPA requirements, it is unfortunately extremely difficult to ever proceed through the admissions process. If your work level is impacting your performance in school, you should try to discuss it with your respective university's student services to see what services may be available to you, so that you can continue to pursue becoming the doctor you've always dreamed of being!

Chapter

5

MCAT

This chapter will be covering all kinds of advice when it comes to tackling the MCAT. In this chapter, we will be discussing: the overall breakdown of the MCAT by sections, recommended resources that some students have used to prepare for the test, some classes in undergrad that will help in preparation for the MCAT, the truth about prep companies, and when to consider writing the MCAT.

Chapter 5: MCAT

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Overview of the MCAT: Outline of Sections

The MCAT consists of four sections:

1. Biological and Biochemical Foundations of Living Systems,
2. Chemical and Physical Foundations of Biological Systems,
3. Psychological, Social, and Biological Foundations of Behavior,
4. Critical Analysis and Reasoning Skills.

In between those sections, there are a total of 3 optional breaks: two 5-minute breaks, and one 30-minute mid-exam break. The total content time of the exam (the time you are writing the sections) is around 6 hours and 15 minutes, and the total seated time of the exam (including writing sections, answering surveys, taking the optional tutorial) is around 7 hours and 30 minutes.

The Biological and Biochemical Foundations of Living Systems is 95 minutes long and consists of 59 questions. The section consists of introductory-level biology, organic chemistry, inorganic chemistry, and biochemistry. The AAMC website states that of the 59 questions, 25% are introductory biochemistry, 65% are introductory biology, 5% are general chemistry, and 5% are organic chemistry. However, they also stipulate that the percentages have been approximated, and will vary from test to test. They are more of guidelines, than precise values.

The Chemical and Physical Foundations of Biological Systems is 95 minutes long and consists of 59 questions. The section consists of introductory-level biology, organic chemistry, inorganic

chemistry, physics, and introductory biochemistry. Of the 59 questions, 30% are general chemistry, 25% are first-semester biochemistry, 25% are introductory physics, 15% are organic chemistry, and 5% are introductory biology. Similar to Biological and Biochemical Foundations of Living Systems, these percentages are guidelines and not precise values.

The Critical Analysis and Reasoning Skills (CARS) section is 90 minutes long and consists of 53 passage-based questions. This section has passages on the social sciences, or humanities, for example, passages on art, Greek mythology, or psychology, that you read, and then answer questions that test your ability to understand, analyze, and reason through what you just read.

Finally, there is the Psychological, Social, and Biological Foundations of Behavior section. This section is 95 minutes long and consists of 59 questions. This section consists of psychology, sociology, and biology concepts. Of the 59 questions, 65% are introductory psychology, 30% are introductory sociology, and 5% are introductory biology.

Giving advice on how a student should focus their time for the MCAT is difficult. We provide some anecdotal evidence from examining the admissions requirements of most Canadian medical schools, as well as past student test results. The CARS section is the section with both the highest admission requirements from some medical schools, but also the section where students tend to have the most difficulty, year over year. Many students that apply to medical school have a science background, and this typically does not prepare you sufficiently for the CARS section making it daunting for students. Despite this, depending on your own personal background knowledge, it may be wise for students to consider how much time they allocate studying for CARS, relative to the science based sections. Generally, students should consider spending more time studying and practicing the material that they are most unfamiliar with (CARS for many) and the material that will pay off the most (a high CARS score will arguably pay off more than a higher score in the other sections). Please consider this advice in line with other advice and tips you are given.

When Should I Write the MCAT?

While there are no absolute rules that apply to everyone, many students with a science or pre-medical undergraduate background typically write the MCAT the summer after the second year of college or university. There are 3 main advantages to writing the MCAT during the summer after second year:

1. Most medicine-oriented students will have the opportunity to take most of the basic science courses (Biology, Chemistry, and Physics) in first year, the advanced science courses (Organic Chemistry and Introductory Biochemistry) in second year, and helpful elective courses (Psychology, Sociology, and English) that will prepare the student well, content-wise, for the MCAT.
2. Writing the MCAT after the second year of college or university will both provide you the opportunity to apply to select medical schools as a third year undergraduate and allow you to rewrite the MCAT, if needed, after your third year of undergraduate study.
3. If you do not need to rewrite the MCAT in the summer after third year, your summer will be free to focus on extracurriculars, volunteering, and research that can add to your application.

Writing after first or third year are both perfectly valid options if you are planning to apply to medical school with the hopes of entering after completion of a four-year undergraduate program.

If you are not currently in a science or pre-medical undergraduate program, the best timing for when to write the MCAT will be based on your own availability. Studying for the MCAT without recent experience with basic science courses may require more dedicated study time to learn and review the material on the test than an undergraduate science student. Generally speaking, you want to find a period of time where you will have about 3 consecutive months to study with the

final 2-4 weeks dedicated to full-time studying. This often means one of your summers for undergraduate students and, in the case of graduate and mature applicants, often involves identifying a period of lower workload and utilizing vacation time for the dedicated study period.

Canadian pre-medical students typically have the window of time from May-September to write the MCAT. There are 5 main considerations to make when it comes to picking your test date:

Do you have sufficient time to study for the test?

It generally takes 2-3 months of studying to prepare for the MCAT and it is important to ensure that you have sufficient time to cover all of the material on the test and work through practice exams.

Will you receive your test scores before applications to medical schools are due?

Your score is released approximately 4 weeks after the MCAT test date, thus, students writing at the very end of August or early September may not receive their scores back before being required to submit their medical school application. You can still apply if your MCAT scores are not available yet, so long as your test scores are reported before the deadline for your schools. If you end up becoming eligible then your application proceeds, but if you become ineligible then your applications may not be looked at and you will not get a refund. This is something to consider depending on your financial situation.

Do I need a break before going back to school/work?

Studying for the MCAT is a mentally exhausting process and many people who write the test will attempt to give themselves a week or more off afterwards before going back to school/work.

Do the medical school programs have any restrictions on when I can write the MCAT?

Some medical schools require you to submit your MCAT scores by a certain date to be eligible. For example, University of Alberta and UBC require you to submit your MCAT score by October 1st of the year in which you are applying. Scores take approximately 4 weeks to be released, thus you cannot write the MCAT in early September if you would like to apply to UBC. Make sure to look at the specific MCAT writing requirements and deadlines for the schools that you plan to apply to before deciding on a date.

Do I need time to rewrite the test during the same testing period?

It is possible to write the MCAT twice in a single spring/summer. You must schedule your MCAT date 4 weeks before the test and you do not receive your score until 4 weeks later, thus, the latest date which you can write the MCAT and rewrite it the same summer is late June followed by late August. This often does not give you enough time to sufficiently prepare for the first MCAT test and is not advisable for someone writing the MCAT for the first time.

Keeping in mind the first three considerations, the most popular dates to write the MCAT tends to be late-July to the first week of September. It provides you 3 months to study, allows you to receive your scores before medical school applications are due, and gives undergraduates a few weeks off after the MCAT before returning to school. It is important to note that MCAT test dates open up 6

months in advance - test takers looking to secure their ideal test date should be looking and prepared to sign up on the AAMC website, in February of the corresponding year!

Study Schedule Breakdown

This will differ from person-to-person and depends on a number of factors including, but not limited to, when you are writing, how long you are studying for, and how much of the content you already know before starting to study. Many study schedules can be found on YouTube and reddit (r/mcat), that you can spend time comparing and exploring. Generally, schedules follow a similar framework:

4-6 Weeks of Content-Focused studying and learning of material: Reading textbooks, watching online modules or tutorials, practice passages/questions.

6+ Weeks of Full-Length Tests/Practice: Prep-company practice tests, AAMC practice tests. Several schedules can be adopted, for example, a full-length test one day followed by reviewing the test the next day, a full-length every 3 days, etc. You can continue to learn or review old content as needed during this time, but the focus should be getting used to the stamina and strategies needed for writing the MCAT.

Prep Companies: Are They For You?

Test prep companies can be a great addition to any student's MCAT studying regimen. With that being said, we want to stress that they are an add-on, and must supplement the student's discipline and study. They are by no means necessary or essential to getting a good score, they are a supplement and should be used as such.

There are several pros of utilizing a test prep company. They provide a clear studying regimen and plan for students who want an outline and some discipline provided, and you can be assured that they will cover all the content on the MCAT. Even with the schedule prep courses provide, it is also an option and even encouraged to work ahead of schedule - this allows classes to be reviewing content you have already seen rather than content you do not know. With that being said, test prep companies should be used to gain skills on process (i.e. test taking for the MCAT), NOT for content. A student can use the AAMC website to find out the content of the MCAT and purchase the required textbooks from a myriad of test prep companies (used, online) for a fraction of the price of taking a test prep companies course. Prep companies may be right for you if you are someone who likes to have concepts explained in person, similar to the format of an office hours. There are several options for prep companies and they are all generally similar. Having instructors to get to know in person may create a different experience albeit more expensive. The greatest asset of prep companies is usually the practice questions, passages, and full-length tests that each course will also provide.

There are several disadvantages of test prep companies that should be discussed. First and foremost, the price tag can range from hundreds to thousands of dollars, depending upon the amount of in-person teaching/tutoring. Remember that if you are willing to pay the price tag for a test prep company's service, you are paying to gain process (MCAT test taking) skills, NOT to have someone teach you content that you have likely already learned, and could learn on your own. This brings us to the second con of test prep companies. A lot of in-class teaching will be teaching content, despite most of the value coming from process. Reason being, to teach the process, one must know the content, and a significant amount of class time will be allotted as such. Related to this, many test prep companies have specific approaches to working through the critical analysis and reasoning section (CARS) of the MCAT. This section is the lightest on content and the most heavy on process. However, due to the unique process and analytic reasoning focus of CARS, strategies to approach the section suggested by test prep companies can be hit or miss for specific students. Generally speaking, no matter what approach to CARS a test prep company teaches, the only reliable way to get better at it is to pick a strategy that you're comfortable with

and practice repeatedly. If you're only looking to improve your CARS score test prep companies aren't reliably helpful enough to recommend.

The Princeton Review

This is a commonly used test prep company that will ensure extremely comprehensive education on content, with some good strategies for approaching the process. The classic Princeton Review teaching programs consist of class ~3 hours a day for ~4 days per week in the mornings, afternoons, or evenings for flexibility in options. The schedule will typically have one subject area assigned to each class (ex: June 1st - Biology Class 7, June 7th - Physics Class 2, June 3rd - CARS Class 4, etc) corresponding to certain chapters of the book. The content will be reviewed while also sharing test-taking strategies and going over practice questions with approaches to them. It may be worthwhile to call and ask how many students are enrolled in a particular class as this may vary. For example, an evening TPR class may have less than 10 students while a morning class may have over 30. Clearly in the former, there is a smaller student to teacher ratio which will create for a more engaging experience that is much more worth the price-tag. Overall, it is important to pick the time that is most conducive to the rest of your life whether that is work, summer school, etc. but the student to teacher ratio of different times can also be kept in mind. They provide solid study regimens to excel on the MCAT and a guarantee that if you do not achieve your desired score on the MCAT, you can retake the class at no charge (please look into the fine print - although they seem to honour this well). The Princeton Review will prepare you very well for all sections of the MCAT, excluding CARS. In terms of CARS, process is far more important than content (which you do not need to know), and the Princeton Review's process strategies for CARS are both cumbersome and complicated. Simplicity of approach to CARS is key, and The Princeton Review does not provide this. If you are looking for test prep for CARS, look to ExamCrackers books (used, older books online will do fine - as long as they are up to date with the most recent CARS). Overall, The Princeton Review prepares you well for content and process for all the sciences on the MCAT, but is lackluster for the CARS section, and overall comes at one of the higher end price tags for MCAT test prep.

Sharing Prep Company Resources

It is possible to decrease the cost of prep company resources by sharing them among friends or peers who are also writing during the same time period as you. Note: this works best if you choose not to opt for in-person sessions but you can decide among your own group to share online resources regardless, the cost just may not be as easily split. Individuals may choose to purchase practice tests or online courses from various companies: ExamCrackers, NextStep, TPR, Kaplan, etc. The logins for the courses can be shared between each other and would allow for a much larger pool of practice questions that are integral to the later weeks of studying.

Private Tutoring

We have spoken about the utility of prep companies in the section above and it is worth speaking a bit about private tutors. The major prep companies often hire students who have done well on their MCAT, provide them with minimal training, and then let them teach a course. This is also true with all CASPer/interview prep companies. Above we talked about the major pros of prep companies which are structure, practice tests and easy to access materials. However, if you have decided to study on your own with textbooks, it is still very valuable to reach out to someone who did very well on the MCAT to learn their strategy. We cannot stress enough that the MCAT is a test of skills much more than content, so your approach to the sections is more important than how much material you can memorize. In terms of finding private tutors there are some factors to keep in mind:

Recommendations

Score	Look for tutors who have achieved high scores. It should not be hard to find someone who scored in the 95th percentile or above.
Experience	Look for tutors who have extensive teaching experience, work for a prep company side or are already in medical school and can also give you guidance on other aspects. Ask around to see if any friends met strong tutors or are close enough with someone to ask for some free advice.
Cost	<p>You should start by looking into free programs in your area where tutors will give free guidance. Oftentimes medical schools may have their own MCAT prep summer programs with medical student volunteers.</p> <p>If not, try to find the best price for experience that you can find. Better to pay someone good \$70-100/hr than someone mediocre \$55/hr. Expect to pay pretty high prices, but no one's hourly fee who is tutoring privately should exceed what prep companies are charging for 1-1 time.</p> <p>You will likely get better prices by finding people individually rather than through an established tutoring company.</p>
Using A Tutor Efficiently	<p>It is best to meet with someone before you start studying so they can give you a strategy for studying and give you an overview of strategy for the sections. This way you maximize your study time by being efficient from the outset.</p> <p>Make sure they clearly write out their strategy on a document for you, so that you can take it home and reference it whenever.</p>

	<p>It is likely not worth your time to spend hours getting tutors to teach you content, because you can quickly blow through your money paying for something Khan Academy would work just as well for. Try to focus on strategy and working through passages together. If there are any high yield topics you notice you are struggling with, then it might be worth it to go over it with a tutor.</p>
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Resources to Use: Overview of Books & Other Resources

Company	Overview	Key Elements
AAMC	<ul style="list-style-type: none"> • The organization that administers the MCAT • Have various resources including question banks for specific sections and practice tests • These may come with other company's resources (for example: can be accessed if purchase TPR Courses) 	<ul style="list-style-type: none"> • The single-most important resource as they are straight from the source, and most representative • Save these for towards the end, when you have done a few full-length tests and know the content well as the score can be very predictive on how you will perform on test-day • These resources are very valuable (do not want to waste them!)
The Princeton Review (TPR)	<ul style="list-style-type: none"> • These books tend to be content-heavy, covering likely more than you need thus good for those that like this type of reassurance • Any course comes with access to online videos, practice 	<ul style="list-style-type: none"> • Content-heavy, comprehensive books • Numerous resources • Questions tend to be more challenging

	<p>questions, passages, and full-length tests</p> <ul style="list-style-type: none"> • The questions and tests tend to be more challenging than the real MCAT will be and thus scores will likely be lower than reality 	
ExamCrackers	<ul style="list-style-type: none"> • Books cover high yield material in a simple and easy to understand manner • Many visual aids that can help with recall • Less comprehensive than some other popular resources • Practice exams approximate AAMC style but can be more difficult and detail-oriented 	<ul style="list-style-type: none"> • Excellent resource for reviewing content for which one already has a knowledge base or when time is limited. Best used closer to the exam date • Practice exams are reasonably close to AAMC style
Kaplan	<ul style="list-style-type: none"> • Offers a succinct yet comprehensive depiction of content covered on the MCAT • Writing style is more brief and factual rather than narrative; ideal for those who prefer straight-to-the point facts • Questions tend to be content based and detail-oriented • Practice exams are not necessarily representative of AAMC style exams 	<ul style="list-style-type: none"> • Books provide succinct, comprehensive, straight to the point content review. Sufficient as a sole resource • Practice exams can be helpful to review knowledge of content but are not similar in style to AAMC exams

Berkeley	<ul style="list-style-type: none"> • Extremely detailed and comprehensive, narrative-style depiction of content • Combination of concept-based and detail oriented questions 	<ul style="list-style-type: none"> • Ideal for those who may be lacking in foundational knowledge; can be used as a primary or reference resource • Ideal for those with significant time to devote to content review and overall study plan • Questions tend to be challenging compared to other resources
Blueprint (formerly Next Step)	<ul style="list-style-type: none"> • Provides full-length practice exams that are considered to be the most similar to AAMC exams • Can be useful to do some exams early on to provide context for studying without using one of the official AAMC exams 	<ul style="list-style-type: none"> • Good additional resource for becoming comfortable with the AAMC style of MCAT questions
Khan Academy	<ul style="list-style-type: none"> • Completely free resource • Online modules/videos and question banks • Comprehensive content coverage but can be very time consuming; ideal to use as a reference to build upon areas where foundational knowledge may be lacking • Question repository is detail oriented and is helpful for retention of information 	<ul style="list-style-type: none"> • Free • Detail focused • Not necessarily representative of AAMC style; best used as a learning tool • Best resource for Psychology and Sociology section (look for the 100 page document online)

Reddit (r/mcat)	<ul style="list-style-type: none"> • Free online internet forum; place for discussions and resource-sharing 	<ul style="list-style-type: none"> • Good for getting multiple perspectives to questions you may have • Filled with years of threads to look back on for common questions
YouTube Channels		

Are There Classes I Should Take in Undergrad to Prepare?

Choosing your major, let alone your classes in undergrad, is one of the most stressful considerations along your premedical journey. Obviously, everyone knows their own capability and the level at which they can operate, but you do want to strike a balance between taking useful and interesting courses that will help you - while still maintaining a high GPA. It is worth repeating here your GPA is the most important part of your application based on the data of schools that release their selection criterion. This is because many schools will not even look at your application if your GPA does not meet a cut-off AND you can retake your MCAT but it is much more difficult to improve your GPA.

That being said, there are some really helpful classes you can take in undergrad that do help with the MCAT. Luckily, many of these classes also commonly fall under the admission requirements for medical school and even non-science majors may have to take these courses. There are also other considerations for which undergraduate courses to take.

Factors in Deciding Courses

1. Does it satisfy a requirement for my major?
2. Is it a requirement for the med schools I want to apply to?
3. Do I need this course to do upper year courses?
4. Does it help me with my MCAT?
5. Can I get a high grade?

The more boxes a course checks, the better it is for you to take it. There are also other considerations like who the teacher is, do I have good notes/labs from past years I could use, are my friends in it, does it give me a longer weekend - the debate is endless.

But, focusing solely on the MCAT, these are the most helpful courses to take listed as being in the A tier, B tier or C tier. This is based on a combination of how much breadth they cover and how many essential skills they cover. Think of A tier as pretty essential, B tier as highly recommended and C tier as useful if you are interested.

A Tier

Course	Breadth	Essential MCAT Skills
Introductory Chemistry	This covers all the non-organic chem components of the chemistry section.	Math, algebra, understanding graphs, understanding proportionality, ratios, applying equations to theoretical questions, experimental design, understanding behaviour of positive and negative charges.

Human Physiology	This covers the basics of all the major organ systems in the human body and key physiologic concepts like osmolarity, diffusion, pressure gradients and how proteins work. Probably the most useful course for med school as well.	Gradients, proportionality, organ systems, negative feedback, understanding graphs.
Introductory Biology	Covers all the non-human biology on the MCAT including DNA replication, cell division, prokaryotes and eukaryotes, Mendellian genetics, evolution, protein transcription and translation, cell membranes, mutations,	Following complex biologic pathways, experimental design,
Biochemistry	A biochemistry course should cover the basics of amino acids, enzyme kinetics, molecular structure of nucleic acids, carbohydrates and fats. Major metabolic pathways like glycolysis, fermentation, Krebs etc.	Michaelis-Menten kinetics, understanding chemical structure, understanding complex biochemical pathways.
Organic Chemistry	Should cover the basics of functional groups, chemical reactions, reaction mechanisms, stereochemistry and key methods for experimental design such as chromatography.	Understanding chemical reactions, applying the principles of polar and non-polar, understanding separation and analysis techniques.
Intro to Physics* (see below)	Should cover all of the physics section including work and energy, kinematics, kinetics, thermodynamics,	Math and algebra, applying theoretical concepts to equations, gradients, proportionality.

	lenses/mirrors, electricity, sound and light waves, fluids, basic nuclear physics, gases, vectors and scalars.	
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B Tier

Course	Breadth	Essential MCAT Skills
Intro to Physics* (see below)	See above	See above
Cell Biology	More advanced understanding of the cell membrane, cytoskeleton, proteins, transporters, gradients, translation, transcription.	Understanding flow of information in biologic systems.
Intro to Psychology	Should cover the basics of the entire psych section. Will likely not be fully comprehensive but should cover: perception, behaviour, mental illness, CNS hormones, learning theories, cognition. You may also learn some really good study strategies from this material. Not A tier because not as difficult of a section as the other science sections so you do not necessarily need an undergrad course to cover it, although it is helpful.	Differentiating between similar concepts, experimental design, reasoning beyond the text.

C Tier

Course	Breadth	Essential MCAT Skills
Advanced Biology Courses	Genetics Research Methods	More advanced understanding of genetics and research methods.
Advanced Physiology Courses	Immunology, cancer biology and other upper year physiology courses.	Understanding biologic systems and research design.
Intro to Sociology	Should cover the basics of the sociology section, although the sociology section does not have much material and many people are able to do well with no prior knowledge.	Differentiating between similar concepts, experimental design, reasoning beyond the text.

*Only A tier if your school weighs chem/phys equally or heavily OR you are good at physics OR your school has an easy first year physics program. For example, in Ontario, the chem/phys section is weighed much lower than Bio and CARS therefore spending the time and energy on basic physics matters less. Additionally, many people who are not experienced with physics can still do well on the MCAT because the content is not as math heavy as an undergrad course with calculators would be.

A common question people ask if there are any undergrad courses that prepare you for the CARS section. This is a pretty difficult question to answer and is course dependent. There is a misconception that taking humanities, history, or art courses will prepare you for CARS, but they will only be useful if they focus on critical analysis of literature. Knowing the material beforehand does not help on CARS very much because it is a highly skill-based section. That being said, courses in English that critically analyze literature, law courses, or philosophy/logic, might be helpful to

develop the critical thinking skills necessary to do well in CARS. Many US schools require English for admission, so if you are planning on taking English look for a course that focuses on critical analysis if you think you can get a good grade.

Once You Are Accepted

Your MCAT score is an important aspect of your medical school application, however, it can be difficult to know what score you need to be accepted. Many schools have minimum overall scores you must achieve, other schools require you to obtain a certain score in specific section to be eligible, and others look at the scores competitively. Most schools have an Admissions page that will outline what their MCAT requirements are, and it would be helpful to acquaint yourself with their requirements as you prepare to write the MCAT. In addition to these requirements, it's also difficult to know what score you need to be competitive relative to other applicants. One strategy to get a clearer picture of what you need to score is by looking at the websites of the schools you are interested in. Many schools will publish statistics for specific years of what the average MCAT mark of accepted applicants, and even for applicants who were invited for an interview. For example, the University of Manitoba has a page that has GPA, and MCAT statistics for quite a few classes. Some schools will also have cut-off marks that you must achieve in order to be eligible for acceptance.

Once you are in medical school, it can be easy to get caught up in MCAT marks and who got what score, but overall, your MCAT mark has no significant bearing on your medical school career. It does not dictate how well you will do in medical school, or what residency position you will get.

Secondaire (FR)

Cours préalables

- Mathématiques SN ou TS de la 5e secondaire ou 068-536 ou l'équivalent
- Physique 5e secondaire ou 054-534 ou 584 ou l'équivalent
- Chimie 5e secondaire ou 051-534 ou 584 ou l'équivalent

Conseils

⇒ C'est important de choisir les cours de mathématiques et de sciences avancés en secondaire 4 qui permettent d'accéder aux cours de secondaire 5.

⇒ Les notes de secondaire 4 et secondaire 5 (étapes 1 et 2) seront considérées par les cégeps. Donc, il faut tenir compte des moyennes à obtenir afin d'accéder au programme du cégep qui t'intéresse. En effet, les programmes de sciences naturelles et Sciences, Lettres et Arts se remplissent souvent lors du premier tour de demandes au Cégep.

Cégep

Introduction

La première étape de sélection pour la médecine, ainsi que pour tous les programmes universitaires contingentés, est la cote de rendement au collégial (Cote R). Ainsi, tout au long du Cégep, la première chose à faire afin de s'offrir la meilleure des chances d'accéder à la médecine est de bien étudier et réussir les cours au meilleur de nos habiletés personnelles. Ensuite, les comités d'admission tiennent compte non seulement du rendement scolaire, mais également des qualités non-académiques des candidats comme la compassion, l'empathie, la bienveillance, l'intégrité, la gestion du stress, etc. Le référentiel des CanMEDS être un outil précieux afin de comprendre quelles compétences et qualités les programmes recherchent chez leurs candidats. Ces compétences seront évaluées par l'entremise des entrevues de forme mini-entrevues multiples (MEM), du test CASPER en ligne et, parfois, du curriculum vitae.

Programmes menant à une admissibilité au doctorat de médecine

- Un DEC en sciences, lettres et arts
- Un DEC en sciences de la nature et avoir atteint des objectifs 00XU (biologie) et 00XV (chimie)
- Un autre diplôme d'études collégiales (DEC) décerné par le ministère de l'Éducation et de l'Enseignement supérieur, et avoir réussi, avant l'entrée dans le programme, les cours préalables suivants :
 - Biologie 301 et 401 ou deux cours de biologie humaine
 - Chimie 101, 201 et 202
 - Mathématiques 103 et 203
 - Physique 101, 201 et 301
- Un diplôme d'études postsecondaires reconnu par l'Université comme équivalent à un DEC ou à un baccalauréat universitaire obtenus au Québec, et avoir réussi les cours préalables ci-dessus mentionnés ou des cours jugés équivalents dans chacune des quatre matières.
- Un diplôme de premier cycle universitaire reconnu équivalent à un baccalauréat et avoir réussi les cours préalables ci-dessus mentionnés ou des cours équivalents dans chacune des quatre disciplines.
- Un diplôme de doctorat en médecine décerné par une faculté de médecine reconnue par le Conseil médical du Canada et avoir réussi l'examen d'évaluation du Conseil médical du Canada (EECMC).

Cote R

- La cote de rendement au collégial (cote R) est une mesure commune d'évaluation du rendement des étudiants au collégial.

- Tous les cours entrent dans le calcul de la cote R sauf les cours de mise à niveau.
- La pondération s'effectue à partir du nombre d'unités propres à chaque cours.

Statistiques du processus d'admission pour les collégiens (Automne 2019)

Université	Laval	Montréal	Sherbrooke -	Mcgill Med-P
Invitations en entrevue	Environ 700	683	708	273 (en 2017)
Cote R	34,921	34,921	35, 101	34,569 Moyenne : 37,031
Offres	340 (en 2018)	307	384	Environ 100
Refus d'offre	110 (en 2018)	129	252	Environ 25
Offre et inscription	130	150 (+ 28 en Mauricie)	106 (+26 au Saguenay)	72
Places prévues pour 2020	128	178 (en 2018)	132 (en 2018)	environ 80
Critères de sélection AVANT les entrevues	- Cote R : 100 % (présélection)	- Cote R : 100 % (présélection)	- Cote R : 100 % (présélection)	- Cote R : 70 % - C.V. (10 %) - Casper (20 %)

Critères de sélection APRÈS les entrevues	Cote R : 50 % MEM : 50 %	- Cote R : 40 % MEM : 50 % Casper : 10 %	Cote R : 50 % MEM : 50 %	MMI : 100 %
Demandes	1104 - en 2018	1235	1540	866
Nombre de sessions au Cégep afin d'être admissible	4 sessions ou plus (le DEC peut avoir été obtenu en plus de 2 ans)	Uniquement 4 sessions (2 ans). Sinon, une justification est requise	4 sessions ou plus (le DEC peut avoir été obtenu en plus de 2 ans)	Uniquement 4 sessions (2 ans). Sinon, une justification est requise

Université

Frais d'admission

- Demandes d'admission : environ 100\$ par université francophone et
- 125\$ par université pour les entrevues MEM Ainsi, 375\$ pour les trois écoles
- \$160.12 pour les frais d'admission à l'Université McGill
- Frais d'hôtels possiblement à prévoir. Nous vous recommandons fortement d'arriver la veille afin de faire l'entrevue à tête reposée, si celle-ci se déroule le matin.

Frais de scolarité approximatifs

- approximativement 5000\$ par année à l'Université Laval
- approximativement 5000\$ par année à l'Université de Sherbrooke
- approximativement 6500\$ par année à l'Université de Montréal
- Université McGill

- Année Med-P: 4,587.85\$
- 1ere année de médecine: 7,780.38\$
- 2e année de médecine: 6,628.38\$
- 3e année de médecine: 6,671.26\$
- 4e année de médecine: 5,027.03\$

Particularités des programmes

Université Laval

- Il n'y a pas d'année préparatoire au doctorat en médecine (pré-med).
- Le programme est flexible. Les étudiants ont le choix entre trois cheminements de programme, soit en 4 ans, 4 ans ½ ou 5 ans.
- Il y a des cours à option à effectuer dans n'importe quels sujets non liés à la médecine.
- Une partie des cours sont des cours magistraux et d'autres sont de type sous-groupes en apprentissage par problème.
- Les cours à l'Université Laval s'étendent le long des sessions universitaires standards, contrairement à plusieurs autres écoles qui fonctionnent par blocs. La méthode de l'Université Laval permet de faire les cours en longitudinal.

Université de Montréal

- 2 campus: Montréal et Mauricie
- Cheminement médecine-recherche possible : M.D.-M. Sc. ou M.D.-Ph. D.

Année préparatoire :

- Prérequis au programme MD (obligatoire pour les collégiens), à quelques exceptions près (pharmacie, physiothérapie, etc.)
- Cours magistraux
- Évaluation succès-échec

Préclinique

- Durée 2 ans
- Apprentissage de la médecine par système (cardiologie, neurologie, etc.)
- Séances d'apprentissage par problèmes (APPs) = discussions de cas cliniques en petits groupes avec un tuteur médecin
- Quelques cours magistraux en présentiel
- Cours IMC/ IDC = séances en milieu hospitalier une fois par semaine. Apprentissage du questionnaire médical, de l'examen physique et du processus de raisonnement clinique. Discussion d'enjeux éthiques
- CAAHC = centre de simulation médicale. Activités environ 1 fois par mois. Accès à des mannequins de haute qualité et acteurs professionnels

Externat

- Durée de 2 ans
- Option de faire l'externat centralisé dans un milieu (tous les stages obligatoires se font soit au CHUM, à Hôpital Maisonneuve-Rosemont ou à l'Hôpital Sacré-Coeur) ou usuel (ce choix offre la possibilité de choisir différents milieux de stages)
- CAAHC: activités de simulation en lien avec les stages
- 7 semaines campus: cours magistraux (pharmacologie, éthique, etc.) avec examens et/ou travaux à remettre

Université de Sherbrooke

- Il n'y a pas de pré-med et le programme se déroule en 4 ans.
- L'enseignement est en présentiel et en auto-apprentissage à la maison. Il est axé sur l'apprentissage par problème et l'apprentissage clinique. Il n'y a donc presque aucun cours magistral.
- L'approche par symptômes plutôt que par systèmes est une particularité à Sherbrooke.
- Le programme est axé sur l'auto-apprentissage :

- Les méthodes d'enseignement sont diversifiées et interactives notamment la méthode APP, soit l'Apprentissage Par Problème.
- Le matériel pédagogique est entièrement numérisé. Vous n'aurez aucun livre à acheter.
- L'immersion clinique débute dès le troisième mois de la première année de médecine.
- Les activités pédagogiques permettent de s'exposer très tôt à la clinique. Ainsi, il existe plusieurs opportunités de faire des consultations à l'urgence ou du bénévolats dans la communauté.
- Les étudiants ont accès à un médecin mentor qui les accompagne tout au long de leur parcours
- Les étudiants peuvent faire leur programme dans les trois sites suivants : Moncton, Saguenay et Sherbrooke

Université McGill

- Deux campus à partir de l'automne 2020 : Montréal et Gatineau.
- Une année préparatoire "Med-P" pour les étudiants admis après le CÉGEP. Environ 40% de la cohorte provient directement du CÉGEP.
- Pendant les premiers 1.5 ans de médecine, les cours magistraux sont offerts tous les matins et les séances d'apprentissage par problèmes sont offerts en après-midi pour consolider l'information.
- C'est l'école qui offre le plus d'exposition clinique puisque les étudiants passent 2.5 ans en milieu clinique.
- Le curriculum est séparé en trois parties (après l'année préparatoire) :
 - 1) La formation fondamentale en médecine et médecine dentaire pendant la 1ere année et les premiers six mois de la 2e année
 - 2) La transition vers la pratique clinique les six derniers mois de la 2e année
 - 3) L'externat en 3e et 4e année
- Les étudiants ont accès au centre de simulation médicale où les sessions sont simulés par des acteurs professionnels. Le centre contient une zone de simulation chirurgicale, des salles de rencontre clinique, des appareils à ultrason et autres.

- Les cours sont enseignés en anglais mais il y a plusieurs opportunités pour pratiquer la médecine en français : plusieurs interactions avec les patients dans les milieux cliniques se font en français, les sessions au centre de simulation peuvent être faites en français, le club de français clinique offre des ateliers mensuels pour que les étudiants puissent pratiquer leur maîtrise du français clinique. La faculté offre aussi des cours de français hebdomadaires aux anglophones.

Et si tu ne rentres pas en médecine...

Rappel : Le bénévolat, qu'il soit à l'hôpital ou non, permet d'acquérir de l'expérience qui servira lors des prochains MEM. Le plus d'expérience vous avez, le mieux c'est! Par exemple, profitez de ce temps pour faire de l'observation avec un médecin. Comment faire? Rechercher, en ligne ou avec des contacts personnels, afin de trouver un médecin oeuvrant dans une discipline qui t'intéresse et les contacter. Vous pouvez demander à vos médecins de famille !

Voici quelques options qui s'offrent à toi

1. Année sabbatique

Opportunité de voyager, de travailler, de partir un projet...

- Belle opportunité d'améliorer son expérience de travail. Comme s'impliquer dans des projets de recherches ou travailler dans un centre médical. Vous pourriez aussi travailler comme assistant de recherche. Un astuce est de commencer par chercher des emplois à travers les banques d'emplois de vos écoles.
- Cette option s'applique seulement aux gens ayant des résultats scolaires qui demeureront compétitif l'année suivante.

2. Aller à l'université

Choisir un programme connexe que vous aimez. Il faut être prêt à possiblement rester dans ce programme. Voici quelques exemples.

- Anatomy and cell biology à McGill
- Physiothérapie/ Ergothérapie
- Pharmacie
- Psychologie

Foire aux questions sur les programmes universitaires

- Est-ce que mon choix de programme universitaire peut influencer mes chances d'admission en médecine ?
- Tout d'abord, il faut comprendre que chaque programme universitaire suit un barème de notation littérale (D à A+) qui sera par la suite converti sur 4,33, soit par exemple 4,33 = A+ = 90% et +. Mais comment comparer 2 personnes de 2 programmes différents avec une moyenne générale de 4,33 (A+) ?
- Pour pouvoir comparer les programmes entre eux, les universités utilisent une cote de rendement universitaire comme outil de comparaison. La cote de rendement universitaire (CRU) est une conversion du GPA en une cote R qui tient en compte « l'indice de force du programme ». Par exemple, un 4,0 GPA en physiothérapie ne donnerait pas une même cote R qu'un 4,0 en psychologie (ex fictif : 37 versus 33 de cote R).
- Ainsi, certains programmes ont de bons indices de force de programme, et par conséquent permet un plus grand nombre de personnes d'atteindre la cote de rendement nécessaire pour pouvoir être convoqué aux entrevues de médecine !
- Comment connaître l'indice de force d'un programme afin de faire un choix éclairé ?

Université Laval

- L'université offre un étalon qui regroupe les cotes de rendement de chacun de leur programme selon les notes obtenues. Cet étalon s'applique uniquement à l'Université Laval. Par exemple, si tu finis avec un 4,0 en sciences biomédicales, cela équivaldrait à 32,872 versus 4,0 en psycho = 30,383 pour l'admission en automne 2020. Donc, si tu es dans un bac en sciences biomédicales à l'université de Montréal et que tu appliques avec un GPA de 4,0 en médecine à l'UlaVal, ta cote R attribuée sera comme mentionnée ci-haut.
- Habituellement les cotes accordées par l'Université de Montréal ont tendance à être supérieures qu'à UlaVal pour un même programme. Par exemple, 2 années de kinésiologie avec un GPA de 4,26 équivalait ~35,77, tandis que l'Université de Montréal ont évalué la cote à 36,387.
- Voici l'étalon de cote r selon le programme offert par UlaVal (année 2020) : <https://www.ulaval.ca/fileadmin/admission/table-des-etalons.pdf>

UdeM ⇒

- Il n'y a pas moyen de connaître l'indice de force d'emblée, mais sur le site de l'udem (lien ci-dessous), il donne la possibilité aux étudiants de demander leur cote de rendement suite à un refus de d'admission seulement ! Si votre cote R du cégep était vraiment basse, après 1 an d'université, c'est pertinent selon moi d'appliquer dans un programme comme médecine, sachant que le refus soit inévitable, car cela permet de voir l'évolution de la cote R du cégep après 1 première session universitaire et éventuellement pour le reste du parcours universitaire si nécessaire.
- Voici le lien pour faire la demande de cote : <https://admission.umontreal.ca/nous-joindre/demande-dinformation/>
 - o Sélectionner dans Nature de la demande : Questions relatives à l'admission
 - o Sélectionner dans sujet : Demander sa cote de rendement
- Après avoir commencé l'université, est-ce que ma cote R du cégep comptera encore ?

- o D'une part, il est important de savoir que l'université fonctionne avec le système de GPA/cote, soit une cote qui va jusqu'à 4,33 pour toutes les universités sauf McGill (4,0). Chaque GPA est transformé en cote de rendement (cote r) universitaire soit une version de la cote r du cégep. Ce calcul prend en considération « l'indice de force d'un programme » et permet de comparer les programmes entre eux. Par exemple, un 4,0 en biochimie pourrait donner 33 de cote r universitaire et un 4,0 en physiothérapie 36 de cote r universitaire, d'où l'importance de choisir un programme qui nous permet d'atteindre une bonne cote r.

- o D'autre part, à l'université, chaque crédit universitaire effectué diminue de 2% la proportion accordé à ta cote r du cégep. Donc si on prend exemple d'une session typique de 15 crédits à l'université en physiothérapie avec une moyenne de 4,0. $15 \text{ crédits} \times 2\% = 30\%$ accordé à ta cote r universitaire et 70% à ta cote r du cégep. Exemple fictif : tu avais 31 au cégep, et maintenant 4,0 en physio te donnerait 36 selon le calcul de l'université, donc ta cote r final (cégep + uni) pour l'admission sera de 32,5 après une session universitaire !

- Est-ce qu'il est possible d'effacer ma cote r ?
- o Après 50 crédits universitaires, Les notes universitaires comptent pour 100% ($50 \times 2\% = 100\%$) de ton dossier. En général, 50 crédits sont atteignables avec minimum 3 sessions universitaires soient 1 an et demi. Donc, si tu as une cote r collégiale assez faible, il te faudrait 2 ans au minimum afin d'effacer complètement ton cégep si cela ne s'était pas bien passé ! 1 an pour ceux qui sont déjà assez proches (par exemple 32,5 - 34 de cote r au cégep)

Particularités de l'admission à l'Université de Sherbrooke

- Sherbrooke considère des universitaires avec moins de 45 crédits (44 et moins) comme étant dans la catégorie collégial et non universitaire.
- Comme nous avons pu voir plus haut, les cote r dans la catégorie/contingent universitaire ont tendance à être supérieure au contingent collégial et les places sont plus limitées aux universitaires.

- Considérant ce que j'ai dit plus haut, après 3 sessions universitaires, je vous suggère fortement de finir avec < 45 crédits, ce qui vous permettrait d'augmenter vos chances d'admission à l'UdeS.

Chapter

6

Applying

Now that you have completed all the prerequisites, the next step is to finally apply to medical school! This chapter explores the whole process of figuring out the right schools for you and all the factors to take into account to preparing your application. It provides you with the tips and tricks to put together an application that showcases your expertise in the best light to that various reviewers that will look at it.

Chapter 6: Applying

A Guide to CASPer

What is CASPer?

Computer-Based Assessment for Sampling Personal Characteristics (CASPer) is a situational judgement test used by medical schools to assess your “real-world” problem solving skills in social situations. Various medical schools across Canada like Alberta, uOttawa, McGill, McMaster, Montreal, Dalhousie and increasingly in the US require CASPer as part of admission requirements. CASPer is taken online through your own computer over a 90 minute session that consists of 12 “stations,” in each you will have 5 minutes to answer 3 questions related to a preceding ~1 minute video or a text-based prompt. There are 8 video-based stations and 4 text-based stations. At the end of each 5 minute station, the next station will automatically progress with no option to return to a previous station. It will move on without you!

The videos consist of brief everyday social conflicts played by actors, where you will have to pay close attention to all of the participants, their dialogue, as well as your assumed role in the scenario. These videos are short and can be dense with names and information so pay close attention! The nature of these scenarios are NOT MEDICAL. CASPer is also used for admissions in pharmacy, dental, nursing, and veterinarian schools across the world. Scenarios generally consist of everyday situations and issues commonly observed in the workplace, social gatherings, or school. Some common themes include issues with team project cooperation, superior/subordinate conflicts, cheating/dishonesty, bending the rules, and taking responsibility as a leader.

Among the 3 questions, the first is generally directly related to the situation, for example:

- How would you handle the situation given your role?

- What do you see as the main issue here?
- What is your primary responsibility here?

The latter 2 questions typically ask tangentially-related follow-up questions:

- How would your decision change if “X” was different in the scenario?
- How is this [insert core theme] relevant to the situation?
- Tell me a time where you showed [insert core theme related to the scenario]
- Suppose “Person 1” told you [insert new information], how does the issue change?

The text-based “stations” are short 1 sentence prompts shown for 30 seconds that largely entail a personal or reflective statement for you to use in answering the following 3 questions. Here, there are no actors or hypothetical scenarios; you need to draw on your own experiences and perspectives to answer the prompt. The 3 questions are generally the same as before. Some examples include:

- Think of a time where you had to make a difficult decision.
- Think of a time where you disagreed with a superior.
- Think of a time where you had to make a sacrifice.
- Think of a time where you lead a project.
- Think of a time where you showed creativity.
- Think of a time where you were uncertain.

Registration

Unlike the MCAT, which is valid for up to 5 years, you must write CASPer during every application cycle. When registering for CASPer, be sure to pay attention to the deadline requirements for the schools you are applying to. Historically, Dalhousie has an earlier CASPer deadline than other schools in Canada, so check the dates for each cycle on their website. On the CASPer website, be sure to also pay attention and register for the proper CASPer test day. Although it is all taken online in the comfort of your home, CASPer test days for nursing, dental, pharmacy, and medical

programs differ, and also differ by country. Ensure that you register for the CASPer in the proper language, as the uOttawa French medicine stream and University of Montreal only accept a French CASPer, while the other schools in Canada (including McGill) require English. This means that you may need to write both the English and French CASPer if you wanted to apply to McGill and French uOttawa for example.

Registering for CASPer costs \$40 USD, and costs an extra \$10 USD for each school that you are releasing your score to. OMSAS (uOttawa & McMaster) count as 1 released score. When registering for CASPer, you must also provide your application ID of each respective school you are applying to in order to ensure that the school receives your score. This means that you need to have your med application portal at each school (or OMSAS) set up with the respective application ID before you register for CASPer.

Preparing for CASPer

There is greater variation in how people approach CASPer prep & strategy than the MCAT. Many people take different approaches to preparing (or not preparing) for CASPer. Some people believe that there is no way to prepare for a situational judgement test like this, some people register for the test a few days in advance with no prep at all, while others register 2 months in advance, purchase 3rd party prep courses/consultation services, and heavily prepare. What follows are some general principles that you can follow to improve your outcome, even if you believe that “there is no way to prep for something like this”. You don’t need to set aside 2 months to prepare for CASPer, nor should you leave a week’s time to prepare. For most applicants somewhere between 2-4 weeks prep is more than enough. As mentioned before, there are NO medical scenarios on CASPer. Thus, pre-reading or having a foundational knowledge of specific medical ethics or issues is not necessary at this point and time in your journey. However, there are other ways you can prepare yourself for CASPer.

For both video & personal text-based questions, your first question will largely involve you needing to summarize the issue or your experience in a clear and concise manner and show your understanding of the factors at play. It can be very helpful to have a general structure to adhere to for the sake of efficiency and to ensure you don't omit important information. Naturally, everyone has their own style of writing and answering questions, but a broad framework should be followed. With only 5 minutes to answer 3 questions, you may only be able to allocate 5, 5, and 4 sentences to each question on average! The assessors are aware of this and thus being strategic and systematic is key. This commonly used framework ensures that you address the following with each question:

1. Problem: Explicitly state the problem to show that you understand the conflict at hand
2. Perspectives: Show your understanding of the key stakeholders or parties by summarizing their perspectives, goals, and roles
3. Options: Entertain the possible options at hand, and their benefits/consequences. It's important that you show that you have come up with more than 1 option.
4. Decision: Formulate a decision and describe the factors that lead you to it. It is more important to show self-awareness of your decision-making process than to have a perfect answer without due process.

Generally, you can assign 1-2 sentences to each of these points, and you will have a strong opening answer to each station. From there, adapt essential points and formulate arguments as needed into the follow-up questions. Keep in mind that you have a lot of personal liberty in your prose to answer these questions; however, ensure that which ever way you decide to approach it, you should address these 4 facets.

Some key "rules of thumb" or principles to stick by:

- It is always safer to not make sweeping assumptions! It shows a lack of nuance and understanding to the assessor. If you must assume something, be explicit in saying that "assuming..."

- There is usually no clear-cut option that will satisfy everyone and that is ok. What is more important is that you show the assessor that you're aware of that fact and work with it.
- Don't be afraid to seek help! If you can involve other hypothetical teammates, coworkers, or colleagues in how you resolve a scenario, by all means go for it.
- This goes without being said, but there are pros and cons to everything. Everyone knows this but the assessor will not know that you know this unless you say so!
- When describing a personal experience, spare the fluff, extraneous details, and verbose language. You don't have time for this so get to the point, quickly summarize the setting and stakeholders, and proceed with your actions and decision-making process as usual.

For all of the personal reflective text-based stations, as well as some of the tangential questions found in the video stations, you are expected to draw on prior experiences and present them in a clear, relevant, and concise manner. This means that over $\frac{1}{3}$ of the test relies on your own experiences! Therefore, it is highly important that a part of your CASPer prep focus on personal reflection and self-insight. Take time to reflect, recall, and solidify key experiences in your life that you can draw on that suit various overlapping themes so you can save precious typing time, improve efficiency, clarify and minimize thinking time.

Broad themes you should be able to address with an experience could include:

Leadership / Initiative, Conflict resolution, Difficult decision making, Overcoming challenges/failure, Integrity / Professionalism, Communication skills, Etc...

Again, you can have an experience to draw on that encompasses multiple themes, and you can emphasize parts accordingly.

There are many 3rd party companies out there soliciting their CASPer prep courses, practice tests, personal consulting/coaching, and other services, but rest assured that just like the MCAT services, they are not necessary for success. You can be successful all on your own without having to pay for these services. CASPer "practice" is largely an exercise of honing your time-pressured interpretation of a scenario and delivery of your personal framework given the constraints

imposed by the test structure. For this reason, timed practice is key to familiarize and simulate the environment of the test. The official CASPer website offers a few non-timed example prompts, videos, and questions, as well as a full-replication CASPer simulated test. Naturally, you should try these closer to the test day for a higher yield simulation. 3rd party companies offer “practice CASPer tests” among other services which you can buy but are by no means necessary for success. You can practice the typing delivery of your framework by answering “traditional interview questions” that ask about personal experiences or “MMI-style questions” that revolve around non-medical hypothetical scenarios under a timed environment with a first-time exposure to the question. There are many resources or question banks of both traditional and MMI-style questions out there all available for free; Reddit is also a good source. “Jerry-rigging” your own CASPer stations is a completely viable way of acquainting yourself to this format early on. Lastly and frankly, it is clear that given the format of the test, there is an advantage given to those who can type faster as you can deliver a more thorough answer given the time constraint. Thus, you can try and work on improving your typing speed and comfort through various typing exercises online but in general this is really only recommended if you are a slower typer (<50WPM). After a high enough WPM (ex: 80 WPM), the returns are diminishing and instead one should focus on honing the clarity and quality of their answers. Deliberate language is more potent than extensive language.

CASPer Scoring

Your CASPer score is not pass/fail and is graded on a percentile basis against the cohorts of people that have answered the same question. Medical schools then receive your percentile scores for each station as well as the total test score. They can even access your individual responses verbatim should they require; however, it is unlikely. While the company keeps their specific scoring metrics a secret, there are a few things we do know in how it is graded per the official CASPer website. For the sake of removing outliers on both ends of the spectrum for a score more “representative” of the applicant, your best AND worst ranked stations are removed, allowing you leeway in case you get flustered or bomb a station. To reduce biases between stations and

assessors, each station of 3 questions is marked by an entirely different assessor and is anonymized! This further supports the strengths of adhering to a framework to achieve a consistent result. Spelling or grammar mistakes do NOT impact your score as stated by the official CASPer website, so it is often more important to save time than to correct minor errors (so long as it is still legible & coherent). Applicants are largely forever in the dark about their CASPer performance with the exception of McGill, which if requested will disclose your CASPer performance as a ranking of received applications (ex: 50th place out of 800 applicants at McGill). They will only disclose this information if you request it AND if you were rejected in the cycle, thus it could be a useful metric for reapplicants to reassess their next application, albeit an indirect CASPer metric as it is not necessarily the exact score CASPer discloses to the school.

Tips on Test Day

- A few days before your testing date, be sure to run the online CASPer System Requirements Check to ensure that there are no bugs, kinks, or tech issues with your computer
- CASPer uses your webcam audio feed as an anti-cheating measure throughout the 90min test, thus, you need to "allow permissions" when your webpage prompts for access
- If you live with other people, let them know on your test day not to disturb you! (I had a roommate barge in without knowing because I didn't warn him, you're still on camera!)
- For the 30s text-based prompts, use ALL the time you have as a "break" to clear your mind and to reflect on an appropriate experience, so you hit the ground running. Don't just jump into the questions with spare time, you want to avoid wasting precious typing time on thinking.
- You can type in full sentences or point form, and the assessors have been instructed to not deduct marks for spelling errors so long as it's intelligible and coherent. That being said, avoid spelling so poorly that you have to retype to achieve coherence.
- Save time! Use simple language, don't bother with frivolous or extraneous language as it does not advance your arguments any further.

- You WILL be short on time, 5 mins is NOT a lot of time and it will move on automatically without you. This is a jarring transition and don't get phased if you have a rough station. Forget it and move on. Remember each station is independently graded so you start fresh every time.
- Useful Hotkey: Ctrl + backspace: efficient whole-word backspacing per key press, saves you time if you really must delete something
- Useful Hotkey: Ctrl + (arrow-key left or right): efficient navigation, jumps entire words per key press. Did you forget to type the word "and", "or", "the", or "a" between few words back? You can jump to that space very quickly if you really must add it.

Preparing Your Application

COVID-19 Update:

At the time of writing, COVID-19 has been continually affecting the specific application timelines, MCAT eligibility dates, grading criteria of individual schools. Check OMSAS or the respective school websites for the most exact and up to date timelines, dates, and application criteria as they may continue to change.

General Canadian Timeline

Application Portals Open:

- OMSAS / uAlberta/ uCalgary / uSask: Early July
- UBC, Dalhousie, Memorial: Mid-June
- Manitoba: August
- McGill: Early September

Last MCAT dates of the cycle:

- Mid-Sept (Note: this may be different for the 2020-2021 cycle with COVID-19 rescheduling and extensions of MCAT dates, and keep in mind that if you write with less than a month to application deadlines, you won't know your score when applying; however, you can still apply)
- UBC: August 31 is last accepted test date
- Memorial: August 29 is last accepted test date
- Dalhousie: September 5 is last accepted test date
- As of the time of writing, other schools have not released their last accepted MCAT dates

Last CASPer dates of the cycle

- Non-Dalhousie/Memorial: Mid-October
- Dalhousie: Late Aug
- Memorial: Mid to Late August

Application due:

- All other schools: Early October (usually first few days)
- UBC: August 4 (early applications), September 15 (normal applications)
- McGill: Early November (usually first few days)
- Dalhousie, Memorial: Sept 2

Referee Forms Due:

- OMSAS: Early December (usually first few days)
- uCalgary: Early October
- Memorial: Early September

Interviews Released:

- Dalhousie, Memorial: October
- UBC: Early December
- All other schools: Late January-Early February

Interview Dates:

- Dalhousie, Memorial: Mid-November

- All other schools: Late Feb-Late March

Admissions Decisions:

- All other schools: Mid-May
- McGill & Dalhousie: Mid-March

Misc Administrative Tasks (Pay deposit, send in final transcript, etc)

- Early to Late June

A General Approach to Preparing Your Application

It is very important to be mindful of timeline and workload when preparing your application. Preparing your application for medical school is more time-consuming than most people realize, leading to a lot of last-minute scrambling to get all affairs in order (CV, verifiers, referees, essays, etc). This is further compounded by the number of schools you intend to apply to, as navigating each school's application system to meet their specific formats, essays, and CV can be very tedious. Some applicants are also concurrently writing the MCAT and/or working full-time and/or enjoying their summer the year of the application cycle, and this is something to be mindful of. Given the later application start of OMSAS and most other schools, writing the MCAT in the same cycle is entirely possible. With that being said, there are a lot of things you can do to help ease your workload and ensure a quality application.

Before the Application Cycle - Getting Organized

Even if you're just in 1st year, there are some things you can do to ease your application burden. Organization is key, so before applying, do your research into what schools you would want to apply to, what requirements they have so you can plan accordingly. What provinces/schools would I consider? How many years do they need before applying? Are there prerequisites or mandatory course loads? Do they need the MCAT and/or CASPer? How is their GPA weighted and are you eligible for favourable calculations? Do they offer preferential considerations for in-province

applicants? If I'm OOP what are some GPA/MCAT goals I should strive for? How does money fit into applying to my schools of choice and their MCAT/CASPer requirements? What special application streams/considerations are available, and do they pertain to me (ex: Indigenous, Black, low-SES, significant circumstance applicants)? It is ideal to have a plan and list of schools you are able to strive for.

Another tip for organization is to continually update your personal resume/CV/LinkedIn that you've been using for job/coop/research purposes as you progress through undergrad. Throughout our undergrads and everyday lives, we participate in so many things that we end up forgetting a lot of what we've lived! Many people forget about activities like volunteering experiences, creative projects, sports activities, unique skills, summer jobs, and even scholarships from 1st year by the time they're applying! It is ideal to keep records so that when it comes time to prepare an application, you have most of everything you've done written down and you don't have to do as much digging. You don't have to have OMSAS formatted entries or descriptions or even verifiers ready at this point, just have an idea of what you've done so you don't forget. If you leave this to the last minute you will be VERY surprised how long this actually takes! There is a reason why US MD applicants are often encouraged to start a whole year in advance! Fortunately, we don't have it as bad as our CV entries are shorter and we have less essays to write.

OMSAS allows for up to 36 CV entries for their personal sketch, and other schools have their own CV formats with similar allowable entries, and this may be an intimidating number. Many applicants ask how they're able to fill all of those out. Rest assured that it is by no means expected that a strong applicant must fill everything. Quality always trumps quantity if you can clearly convey the value of your experiences. However, when you continually record what you've accomplished, many applicants are surprised with themselves when they see that they are able to fill out many meaningful entries; just that they had completely forgotten that they did them in the first place. In general, classify each entry into education, employment, extracurriculars/hobbies, research, awards, and other (personal experiences). A few tips on what you can include:

- Employment: No job is “too irrelevant” or “too low-level” to include in your application if you show the skills you’ve learned! Schools look for well-rounded applicants with lived experiences, so your first job at 16 as a high-school tutor could be included to describe your teaching skills, or your first job in fast food could be included to describe your learned experiences in customer relations.
- Extracurriculars - Sports: You don’t have to be a national-level athlete to list a sport, you can list something as simple as intramurals or personal fitness as a hobby so long as it is meaningful to you and you convey it well.
- Research: Even if you don’t have a publication (many undergrads don’t!), you can list anything tangible to come out of your research, including but not limited to conference abstracts, poster presentations, grants, and manuscripts under review. It is always a good thing to show that your work has manifested into something!

Start of the Application Cycle - CV, References, and Essays

With a rough list of what you’ve done, now it is time to formally prepare the administrative details of each activity (title of activity, dates, duration/time spent, address, institution/organization name, verifier contact info) and prepare a description of what you did for each. Being mindful of the schools you are applying to and their CV format, prepare a description of each activity adhering to their character requirements. Some CV description limits are short (OMSAS = 150 characters), while some are longer (UBC = 300 characters), while some have other additional caveats to allow for further elaboration (uCalgary top 10 experiences = 1000 chars each, Western extended ABS = 2400 chars each). Especially for the shorter formats, being concise is key. Keep the fluff to a minimum and keep your roles and accomplishments clear and tangible. You want to ensure that the core description comes across as concrete and non-abstract as possible. For longer entries where you’re expected to flesh out your description, then you have the room to include things like situational anecdotes, challenges you have overcome, what you learned, what traits you exemplified, etc.

As you compile and prepare your many CV entries, ensure that you have a clear-cut verifier for each. It can be an administrative burden to reach out to all of your verifiers, but it is important to ensure that their contact information is correct and that they know you are using them. Some schools either contact by email and some schools contact by phone so ensure your verifiers are not caught by surprise. Generally, most schools that require references ask for 3 people. It is generally recommended for applicants to have 1 academic and 1 non-academic reference, with the other one being at your discretion. Regardless of who you choose, ask them early on to give them time in advance to write a letter or prepare concrete information to say about you. Most schools in Canada have transitioned away from explicit letters of references and instead have opted to use email standardized forms that include survey scoring elements and short-answer questions. Rather than have to worry about your references sending their letters in on time, the school will contact them and provide a deadline of which the form must be completed. In researching what schools you are applying to, check whether or not they need references and what format that entails to give your referees a heads up.

Lastly as an administrative point, be sure to look into the transcript deadlines for initial application & GPA verification. If you are applying OOP, you typically have to arrange for your school to send an official transcript with seal via mail to the specific admissions office address by a certain deadline and at your own expense. This cost can add up if you have to send a transcript to UBC, Calgary, and Manitoba as an Ontario applicant for example.

School-Specific Tips & Nuances

Ontario Medical Schools Application System (OMSAS)

OMSAS is the aggregated application system for all Ontario schools, and allows the applicants to fill out 1 CV format to cover all of these schools. The shortest CV format of any system in Canada, you are only allowed 150 characters to describe each entry. For this reason, brevity is everything.

OMSAS is also the system where you enter school specific application information like Toronto's essays, or Western's extended ABS.

The OMSAS referee forms will ask your references the following:

- Would this applicant make a good physician?
- Rate the applicant on each of the following attributes: Communication skills, Problem-solving skills, Professionalism (e.g., commitment to ethical practice, standards of behaviour and accountability to others), Empathy (e.g., demonstrating consideration of others' perspectives)
- Identify and comment on 1 area of improvement for the applicant
- Share any other information you feel may be relevant to a medical school's admission committee

University of Toronto - Essays

The University of Toronto expects applicants to complete Brief Personal Essays as one of the non-academic components of the application for their medical program. These essays are:

- Brief (250 words max each);
- Personal (reflective of personal thoughts and reasoning);
- Should reflect qualities in the four non-academic competency clusters, from the CanMEDS competency framework :
- Professional (maturity, reliability, perseverance, and responsibility)
- Communicator/collaborator/manager (communication, collaboration, teamwork, time management, and leadership)
- Advocate (advocacy, community service, and social responsibility)
- Scholar (academic standing, achievements in leadership, research and social responsibility as demonstrated by, but not limited to, awards, conference presentations, publications, and scholarships)

The essays are assessed in the following ways:

1. Does the response answer the question being asked?
2. Is the response clear and do we understand the argument?
3. Is the writing style concise?
4. Is the applicant able to personalize their response by providing examples?
5. Will the individuals reviewing the essay responses be able to identify these clusters in our responses?

Recommendations to prepare your essays

While each applicant will approach the essay prompts in different ways, we recommend that you spend a considerable amount of time thinking about the prompt and asking what the prompt is specifically asking you to answer. One of the most common pitfalls of applicants during the application cycle is not answering the question asked by the prompt. It is therefore important to spend an appropriate amount of time thinking critically, brainstorming, and exploring what the prompt is asking you to complete.

Another common pitfall is not clearly communicating the CanMEDS qualities in your personal essay. What we recommend in this respect is to imagine yourself as someone who is reading your application with these criteria in mind. After reading your own personal essays, would you be able to directly and clearly pick out which CanMEDS qualities you sought to communicate? If you were to give your personal essays to a friend, or family member outside of medicine, and gave the CanMEDS criterion, would they be able to identify which qualities you sought to communicate? Clear personal essays make it easy for the reader to identify what you are saying, and to confirm that these criteria have been shown.

Oftentimes, applicants might feel pressured to present stereotypically “professional”, or “out of the ordinary” experiences. In our perspective, the uniqueness of the experience matters less than your ability to communicate the lessons from the experience. The Admissions department is quite aware of the numerous structural barriers preventing most applicants from accessing “out of the ordinary” opportunities, such as prestigious opportunities abroad. While these experiences are certainly impressive, the critical value to capture here is the depth, and applicability of the

experience to the CanMEDS qualities. Writing about your experiences as a camp counsellor, or taking care of your mother, or family member, or working at Wonderland, can be described in an equally, if not more reflective, and compelling way, than someone's summer research internship at a Harvard basic science lab. Focus on the lessons, and be confident that your experiences place you in a position where you can add to the profession.

One way to consistently communicate your reflections is by using the STAR(R) method, adapted from the field of Behavioural-based interviewing :

- Situation: when/where- set the scene
- Task- the goal, aim, or challenge
- Action- what you did, what was your role
- Result- what was the outcome
- Reflection- what did I learn

Following this kind of structure can save you from yourself, particularly when you feel motivated to continue writing about the Situation, Task, and Action, instead of discussing the Results, and more importantly, the Reflection. Treat this as a kind of written "thought package" to communicate a reflection at the end of every situation. At the beginning, it may not sound "artsy", or have a lot of "flair", but it will be clear, and that is what matters. You can work on the polish with time.

Western University - Abbreviated Autobiographical Sketch

On top of the standard OMSAS ABS, Western expects applicants to complete an extended version elaborating on their experiences similar to an essay format. A minimum of 4, and maximum of 8 "essays" are to be written highlighting one's personal experiences to the following 4 core values:

- teamwork and leadership
- respect for diversity, equity and inclusion,
- social accountability and social responsibility, and
- self-directed learning, problem-solving and critical inquiry.

According to Western, a strong applicant is expected to write 2 “essays” up to 2400 characters each for each of these values. This is where one can take a similar approach to Calgary’s Top 10 Experiences, or the US AMCAS applications to describe their personal experiences in detail and how they relate. Western uniquely allows for a high volume of text for these experiences not found with any other university in Canada and thus you can go into much more detail than you normally could, but be cautious not to add too much fluff or verbose language. As always being concise and to the point mitigates reviewer fatigue and will be much better received.

University of Calgary - Top 10 Experiences

One of the unique aspects of the U of C application is the Top 10 Experiences section. This is their way of learning what events, experiences or skills have made you into the person you are, and in turn why you would make an amazing physician. These top 10 experiences do not need to be extravagant or impressive. On the contrary, what makes this section impressive is writing that shows self-reflection and growth. Here are our tips...

Pick experiences that truly made an impact on you, not experiences that seem impressive. Writing about how your job at a fast food restaurant helped to develop important life skills and lessons that you will carry with you for the rest of your life is infinitely more impressive than writing about some volunteer work that you found boring and unfulfilling, but that you did anyways because you thought it would look good on your application. This section is about personal growth and self-development, not prestige.

Keep your description of the experience brief - focus on how you have grown or learned from it. Application reviewers are not interested in the step by step instruction manual on how you completed your research project. They want to learn how an experience has impacted you. So, keep the description brief and expand on the effects it had on you going forward.

Show evidence of self-reflection. Self-reflection is an imperative skill for a physician to have. Demonstrate to the reviewers that you know how to take the time to ponder an experience and learn from it without external prompting. When you tell them about how you climbed Mount

Everest, focus more on showing them all that you learned about yourself on that long ascent, and less about how far you could see at the top. How did you get there? Did you make mistakes along the way? How did you avoid making those same mistakes again later?

Be yourself. Corny as it sounds, the only way you can guarantee that your application will stand out is if it is as unique as you are. Let your application touch on all the different aspects of who you are and why you are that way. The Top 10 Experiences are a beautiful way to showcase individuality, so use that to your advantage!

University of Alberta

You will need to fill out 2 separate applications for U of A. The first is a general application that anyone applying to the university fills out. It includes basic demographic information and not your grades or CV. Once you complete this section, you will be prompted to start the Medicine Application.

This is where you are asked to list personal activities organized into the following categories: employment, awards, leadership roles, volunteer work, and diversity of experience. For these sections, they want you to keep it brief. We know this because the character count is very small, allowing you to write maybe 2-3 sentences about each experience. Use these sentences wisely, by briefly describing your responsibilities in a way that highlights what skills you have gained from each entry that will make you a good doctor. Remember, you don't need to spell it out to them (i.e. and that is why I will make a good doctor); instead focus on using those precious characters to paint a picture of what you have done. You will need a verifier for each entry you make to the personal activities section, so make sure you choose someone who can actually speak to your role in whatever that activity was. It is also recommended that you let your verifiers know that you are giving their contact information to the U of A so that they can expect their call and have time to collect their thoughts regarding said activity.

Finally, you will be asked one long answer question that will allow you to go deeper in your answer. This is your chance to stand out from the rest of the applications through your unique life experiences, personality, and skilled self-reflection. It is always a good idea to have someone read

and edit your long answers to make sure that grammar isn't a deterrent when a reviewer is reading your application.

University of British Columbia

Academic Record and MCAT

Overall academic average is calculated based on all university transferable courses including summer and graduate level courses. An adjusted academic average is also calculated for some applicants where the academic year with the lowest GPA, at most 30 credits representing the worst scores of that year, are excluded from the academic average calculation. The adjusted academic average is only calculated and used for applicants who have at least 90 credits with grades by June 1st of the application year.

The minimum MCAT score required for applying is a score of 124 in all sections on one exam. The best MCAT score will be considered if you have written the exam more than once. Given the minimum scores are met, the scores are only taken into account post-interview.

Non-Academic Qualities

There are five categories in the Non-academic Activities section:

1. Leadership – 3 entries
2. Service Ethics – 3 entries
3. Capacity to Work with Others – 5 entries
4. Diversity of experiences – 10 entries
5. High performance in an Area of Human Endeavour – 3 entries

There is some flexibility in deciding which category best fits your activities given there is often overlap especially between leadership, service ethics and capacity to work with others. Read the definitions for each category provided by UBC in the Application Help Guide and select as best you

can. If you have reached the maximum number of entries in a given category and there is an activity that you believe really demonstrates your preparedness for a career in medicine, try to place it in another category and emphasize aspects of the activity that better fits that category. The Diversity of Experiences category has a broad definition so try to make the best of it. Think outside the box, anything and everything that highlights you as a person and your potential for a career in medicine may go here. This includes hobbies, travel, sports, self-taught skills, significant life experiences/adversities and even research if it did not fit neatly into any other category. Lastly, High Performance in an Area of Human Endeavour category is a tough one. This category is for high performance within the last 6 years that involves ranking by an official organization (i.e. the Olympics, national level competitions). Don't worry if none of your activities fall under this as that is the case for most students.

There is a 350-character limit for activity descriptions. This is an opportunity for you to demonstrate how your values and abilities align with the qualities that the faculty of medicine is looking for (i.e. CANMEDS). Describe what you did, provide context and the impact of the activity on others or even yourself. If possible, always quantify and provide specific details to paint a picture for the reader (i.e. led a 'group of 10 students' instead of a 'large group'). Start writing early so you can revise and get feedback from family, friends and your verifiers. There are also sections for Employment History, Research and Awards that contribute to your non-academic qualities score. If you had a paid co-op position in research, this would go under employment rather than Research. The Research section only allows publications and presentations to be included. If you have research experiences where there were no presentations or publications, this could be included in the Diversity of Experiences category or another category as appropriate within the Non-Academic Activities section.

Verifiers

Verifiers who can confirm the dates, hours, description and other details must be included for extracurriculars and any employment. Activity supervisors are best as opposed to co-workers/colleagues. Family members or friends may be used as a last resort if there are no other

appropriate verifiers (i.e. personal hobbies, self-taught skills). Before submitting the application, share the activity description and hours you have included with the verifiers to make sure that they are in agreement with what you have put down.

Memorial University

Application Streams

Memorial University reserves seats for select populations. The distribution of the class population is: 71% from Newfoundland and Labrador, 12% from New Brunswick, 5% from Prince Edward Island, 6% from the rest of Canada or International, and 4% of the seats are reserved for those of Indigenous descent. As such, applicants will need to identify their correct stream prior to applying. This information is easily obtained on the Memorial's admissions website. The level of competition in each stream varies per year, but the "Other Canadian Provinces..." stream is noted to have the highest level of competition.

Application Requirements

Academic Record and MCAT

Applicants will require a bachelor's degree from a recognized university or university college prior to admission. An applicant may be exempt from this requirement if they completed at least 60 credit hours from a recognized university or university college, and is an overall exemplary candidate. In essence, this type candidate would have outstanding academic results, and a highly diversified autobiographical sketch.

Memorial does not require a minimum average requirement. However, they note that students will need to demonstrate the academic ability necessary to manage the medical school curriculum. Memorial published that their average applicant's GPA is approximately 85%. However, this is dependent on the competition of the stream. Typically, students require a higher average if they are applying in the "OOP" pool to obtain an interview.

Similarly, Memorial does not require a minimum MCAT score. They indicated that average matriculant application scores range between 125-128 per each section. However “OOP” applicants may require a higher score to obtain an interview. Memorial considers all MCAT scores written within 6 years of the application.

Reference Letters

Two professional reference letters are required, with at least one reference coming from an academic source. An academic referee could be professors, graduate teaching assistants, or even co-op supervisors. A non-academic referee could be a volunteer or work supervisor or post-secondary coach. No personal references are allowed. Please see Memorial’s admission webpage for more detailed information.

Personal Qualities and Casper

There is an autobiographical sketch section that allows applicants to briefly describe their work, volunteer, research, and extracurricular endeavors. This is essentially a more detailed CV. If an applicant feels disadvantaged, or had less opportunities to engage in traditional endeavors, they can describe such factors in this section. Overall, the admissions committee strongly values consistency of experiences, and a “demonstrated altruistic commitment to be involved with and contributing to their community”.

This section also includes a few essay styles questions. These essay questions often inquire about your personal characteristics and thoughts. For instances, you may be asked to discuss how you spend your time, or your interest in medicine. These essays provide applicants an excellent opportunity to express how their qualities align with the CanMEDs competencies. Carefully evaluate each prompt, and identify the underlying theme of the question. Then, answer the prompt in a clear, concise manner. The character count for these essays is relatively short, so brevity is essential to maximizing your impact in this section.

Casper will be required for the upcoming 2020-2021 application cycle. Please refer to the Casper section for more details about this online examination process.

Overall Evaluation

Memorial does not publish the weight of each section; however, they stress that each file is reviewed in a holistic manner. For more information, please visit Memorial University Faculty of Medicines home page.

Chapter

7

MD/PhD

This chapter will provide insight for those looking to combine their passions for Academia and Medicine in the pursuit of a MD/PhD degree. Before committing oneself to any path, especially this one, it is necessary to weigh the advantages and disadvantages of combining a PhD degree with your MD against choosing to complete a PhD before or after medical school. In addition, this chapter will inform you of the specific details regarding the process of applying for the MD/PhD stream including key fixtures such as your personal statement, interviews, etc. There are also prevalent misconceptions that are addressed in order to give you the perspective you may need to definitively decide whether this is the right choice for you or not.

Chapter 7 – MD/PhD

Authors:

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The MUD and the PHUD of the MD/PhD and physician-scientist pursuit

When we think of physicians in the contemporary health care system we often think of the numerous specialties and subspecialties. Within these specialties are physicians who spend 100% of their time on clinical tasks, as well as those who spend a portion of their time on clinical tasks and another portion on another task including teaching, administration, or research. Those spending time in research (typically 70-80%) and clinical tasks (typically 20-30%) are known as physician-scientists. They conduct research in a variety of fields which can include, but is not limited to, basic science, translational research, clinical trials, medical device engineering, the philosophy and history of medicine, law, English, economics and health systems research. There are many reasons people decide to become a physician-scientist, but often it includes some form of passion towards patient care as well as improving the practice of medicine through experimentation and inquiry. This pursuit is challenging but extremely rewarding to those who have taken it [[resource](#)].

To become a physician-scientist there are several pathways with the one available at the pre-doctoral level being the MD-PhD program. It should be noted that there are also MD combined with a master's programs, though these are newer and not as well established at this time. All exist with a common idea to provide medical and researcher education to prepare for the physician-scientist journey.

Focusing on the MD-PhD pathway, how exactly do you manage doing two doctorates? Program structure can vary though in general 3-4 years are spent completing the MD and 3-5 years completing the PhD. Traditionally the program is structured to start with 2 years in the MD program, then 3-5 in the PhD program, followed by the remaining 2 years of the MD program. For program specific details you can visit each program's website [[resource](#)] or this 2016 peer-reviewed assessment of differences in program structure across Canada [[ref](#) Figure 1].

“It takes a long time to become a physician-scientist, but we love what we do and encourage you to think about pursuing such a career.”

- [Aimee S. Payne and Skip Brass](#), University of Pennsylvania MD-PhD program.

Why Do a Combined MD/PhD

There can be a lot of uncertainty about if, and when, to pursue doctoral studies during your medical journey. In short, there is no right or wrong answer. Doing a PhD, on top of an MD, is not a quick and easy decision. What matters is that your timeline works for you and excites you, even when days get tough.

By pursuing both degrees in a combined MD/PhD program, you are taking an integrative approach. By pursuing a year or two of pre-clerkship medicine first, you have some time to explore your clinical interests and start to understand the relationship between medicine and research, which in turn can influence your PhD research question. You then have 4-5 consecutive years in graduate school. This is protected time to fully explore and appreciate research rigour and a range of research approaches. You then return to medical school with a new lens. Moving forward, you have two hats, and you can take one hat off and put the other hat on, interchangeably.

Here are a few reasons why pursuing the combined MD/PhD program is beneficial. Many personal factors determine a person's decision, but some 'universal' ones are:

- Formal training in both research and medicine that can open and be competitive for many career opportunities
- An integrative approach, from the beginning, that allows both worlds influence the other
- A tight-knit community of students on the same journey, both in your institutional program but also across Canada (e.g. Clinician Investigator Trainee Association of Canada), which provides social relationships and mentorship opportunities from clinician scientists, senior students, and peers
- Specialized training seminars, workshops, and networking events on clinician-scientist-related skill sets
- A funding policy – although this differs from school to school, most MD/PhD students receive funding during both their research and medical training, given such a long career path
- Although you may not know your clinical speciality yet when deciding your PhD research question, you can still develop a research toolkit which you can then apply to future research aims, no matter the clinical field

However, it is important to be transparent about the potential challenges that arise while pursuing this dual degree program, among others:

- The program length can be 6-9 years, which can feel daunting, especially when it may require residency and/or post-doctoral training afterwards
- There is potential for lost income early in your career as a clinician scientist
- Funding for jobs in both research and medicine can be limited at times (although in high demand at other times)
- It can be difficult to take 4+ years away from clinical training to pursue the PhD degree, and there can be challenges for students transitioning between these degrees, both academically and socially

There are multiple other ways to pursue training that leads to becoming a clinician scientist. Here are a few other options to think about:

- You can complete a full PhD before entering medical school. This gives you time to mature and grow. This also gives you a different perspective heading into medical school. This method may also not rush you – you decide when you feel ready to complete your PhD and when to apply to medicine. However, once you enter the world of medicine, undergraduate medical school and residency could be anywhere from 6-10 years. You can still be involved in research during these years, but it will be constrained and it can be a challenge to maintain your publication record and productivity during this time as you pursue an eventual career in medicine and research. Your PhD work may not seem as relevant or current after years of medical training, especially when you eventually want to apply for grant funding or faculty positions.
- You can complete a PhD during residency, in a program such as a Clinician Investigator Program (CIP), or similar. This gives you time to really explore different research projects and clinical interests during medical school, and tailor your PhD research question to your clinical speciality, perhaps stemming from clinical problems you face daily with your patients. In this structure however, you may not have the same valuable, protected time as you would in graduate school. It may also not be as integrated as doing research prior to residency (such as in a combined MD/PhD program).
- There is also the option of not doing a PhD at all, and pursuing research opportunities through medical training. You can be a clinician scientist without a PhD.

Misconceptions about Admissions Requirements for MD/PhD Programs

When applying to medical school and to the MD/PhD program specifically, many of us were worried that we did not fulfill the unwritten requirements of such a competitive and challenging

program. These fears and assumptions of seemingly impossible standards were supported by hearsay of fellow applicants and by the accomplishments of the outstanding individuals that had succeeded in being accepted into MD PhD programs. We are confident that many of the individuals reading this guide will have heard similar information and are harbouring similar fears and anxieties as we did when we were applying. With this section, we aim to dispel some of these common misconceptions and hope to encourage individuals to apply to MD PhD programs.

Misconception #1: You need a first author Nature/NEJM paper to stand a chance.

While having published research to include on your application will certainly work in your favour with respect to increasing chances of being offered an interview or acceptance into MD/PhD programs, published research is not a requirement. Having published work related to a summer research project or to master's work demonstrates a commitment to and a genuine interest in research, which is something that all MD PhD programs are seeking in applicants. However, having done the research even in the absence of a publication can also demonstrate these qualities. It is important not to be discouraged from applying simply due to a lack of publications; many of us were accepted into Canadian MD PhD programs without any. Also remember that if you are working on a research project that is close to being published, i.e. you are involved in completing final experiments before the paper is written, or you are contributing to a paper that is under review or revisions, you can speak about this if you are granted an interview to further show your interest in and dedication to research.

Misconception #2: You need a master's degree in order to stand a chance.

Again, while having had extensive experience in a research setting through the pursuit of graduate studies is an asset on an MD PhD application, it is not by any means a requirement. This notion is supported by the findings of a study published in 2017 reflecting information about the degrees of 132 Canadian MD/PhD program alumni, where it was reported that only thirty-one respondents (23.5%) of alumni had entered MD/PhD programs holding master's degrees

(Skinnider et al., 2017). Most individuals reported having only completed bachelor's degrees prior to applying to MD/PhD programs. It is highly recommended that individuals demonstrate through their application (i.e. personal statements, past research experience, etc.) that they are committed to the clinician-scientist path. If you do this and as long as your application is competitive in other respects, we encourage you to apply to your MD/PhD program of choice.

Misconception #3: You need to have a supervisor and/or lab and/or project lined up at the time that you are applying.

While some of the MD/PhD programs in Canada, like McGill and the University of British Columbia, expect students to attend their MD/PhD interviews having already thought about and even having contacted potential supervisors, this is not universal across all MD/PhD programs in Canada. The MD/PhD program at the University of Toronto, for example, does not require students to come to interviews prepared with a supervisor, lab, or project. Ultimately, this will vary by school; this guide does not aim to provide an exhaustive list of MD/PhD programs that require such preparations prior to interviews, as this information is available online. It is encouraged that students reach out to the MD/PhD program at their school(s) of choice to inquire about whether this is a requirement if it is not apparent on the MD/PhD program websites.

Misconception #4: Pursuing an MD/PhD program is financially infeasible.

While it does take MD/PhD graduates longer to begin earning a staff-level salary as compared to their MD counterparts, MD/PhD students at all Canadian medical schools receive a stipend beginning in their first year of studies to offset living expenses associated with being in a lengthy program. Whether or not pursuing the MD/PhD program and earning only this baseline stipend for 8 years is financially infeasible is highly dependent on each student's personal situation as related to balancing the stipend with expenses. Before applying to MD/PhD programs, it is encouraged that students reflect on their personal circumstances and expenses and investigate the funding arrangements at their institution of interest.

In addition to this baseline MD/PhD funding, students are encouraged to apply for competitive funding. There are several scholarships and grants funded by the universities, the provincial and federal governments, and other foundations/organizations, which students are encouraged to apply to. Furthermore, depending on the value of the award, students who are successful in receiving competitive funding may receive top-up funding from their graduate department or from their MD/PhD program. Furthermore, many MD/PhD students, like their MD counterparts take a line of credit when starting medical school to help with the costs of being in a lengthy program. While this option is not for everyone, it is an option if one feels that it is required.

Misconception #5: You need to decide on a clinical specialty before pursuing the program.

It is not required to have decided on a clinical speciality before pursuing MD/PhD training. Many students enter MD/PhD programs without even having decided on the type of PhD that they want to pursue, and many end up pursuing a type or field of research that is completely new to them. There is the argument that having a clinical specialty in mind and being able to align the PhD field of study with this clinical speciality is helpful in terms of future career prospects, as it allows the individual to make connections within that sphere and as it will reflect favourably on the applicant during the residency matching process. However, because of the dedication and hard work that is demanded of MD/PhD students, pursuing an MD/PhD program in and of itself reflects favourably on the individual and will be beneficial in the residency matching process. To summarize, while it may be helpful to have an idea of a clinical speciality before pursuing the MD/PhD program, it is not a requirement or expectation.

Misconception #6: Applying to the MD/PhD program increases your chances of getting a medical school interview as compared to applying to the MD program alone.

We, the writers of this chapter, have experienced mention from both past and present applicants that, for one reason or another, they came to believe that applying to the MD/PhD

program at their school(s) or choice might increase their chances of getting a medical school interview. It is unclear where the idea that MD/PhD programs are a backdoor to medical school was derived, and we do not aim to address the possible sources. Based on what is published on MD/PhD program websites, there is no information to suggest that applying to the MD/PhD program at each respective school would increase an applicant's chances of getting an MD interview. Furthermore, an applicant who is successful in gaining acceptance into an MD/PhD program would have gone through two separate interviews and would have had to demonstrate excellence in all of the areas assessed for general MD applicants, and additionally, would have had to show commitment and excellence within the research sphere.

If you are an individual that has a strong research background and has shown exceptional research productivity, then it is likely that MD/PhD programs would look upon your application favourably, but excellence in research does not waive the requirements for all of the other aspects assessed for MD programs (i.e. GPA, MCAT, extracurriculars, etc.). We would highly discourage anyone without a genuine interest in pursuing a clinician-scientist path from pursuing the MD/PhD program because of the belief that is a backdoor to medicine. Applying to MD/PhD programs with such motivations not only makes it more difficult for other applicants who are genuinely interested in the program to gain acceptance, but it would also be doing one's self a disservice because the program is challenging to begin with, and pursuing it without a genuine desire to do so would make it even more challenging.

MD/PhD Application Process

The overall MD/PhD application process is very similar to the MD application process: an initial application plus an interview prior to an offer of admission. The initial application is submitted to both programs. You can think of it as an additional application that accompanies your MD application to the admissions committee. Most, if not all, schools have two separate admissions committees: one MD/PhD committee and one MD committee. To be accepted to the MD/PhD program, both MD and MD/PhD applications must be successful.

It is important to note that every school has different requirements for their application. Commonly, some of these requirements include a CV highlighting research experiences, essay(s) answering why you want to pursue MD/PhD training which includes your field of interest, plus 2-3 strong recommendation letters from referees who have observed your research skills.

With any application, it is essential to plan ahead. By referring to and noting the important dates and deadlines from websites and guides of your program(s) of interest, you can plan and gather the necessary documentation for a successful application. It can be a daunting task since there may be many documents you need to prepare but try to spread out the work and treat it like a marathon, not a sprint. Also, if you are unsuccessful on your first try, reflect on your application, and try to find areas of weakness that you can improve on. Do not give up – many applicants apply multiple times before they get accepted!

MD/PhD Personal Statement

As previously mentioned, when applying to an MD/PhD program, some schools require additional MD/PhD essays accompanying the MD application. These materials generally focus on your research experiences, your motivation for pursuing a clinician-scientist pathway, and what you wish to pursue in your PhD. This may be required to be written in one short essay or required to be written in multiple separate essays. If written in one essay, it may be called a “personal statement” or “letter of intent”. It is important to read and carefully follow the instructions for the particular school you are applying to. Schools across Canada also have different application deadlines, so be sure to carefully make note of each deadline!

The MD/PhD essay is the best opportunity you have in order to make the case of why you will be most fulfilled working both as a physician and a scientist. This is a fine balancing act between your desire for patient interactions and your passion for research. If this is out of balance in your

application, it may seem that you should apply to an MD only route or a PhD only route. This a common challenge that will re-occur throughout interviews as well.

Prior to writing your essay(s), it is best to give yourself enough time to reflect on your experiences and brainstorm your ideas. It is important to look up the skills and competencies that the school values (generally listed on their website) and try to reflect on your experiences that can highlight these skills. Another early and important task is to find a few trusted people that can commit to assisting you with editing later on. Constructive criticism is essential to enjoy science and wanting to combine the fields of science and medicine as a career. Brief anecdotes are always enjoyable to read and offer an inside look into who you are and is one of the best ways to make your essay unique. When writing an anecdote, it is important not only to write what you did, but to show reflection on what you have gained from these experiences and how it has shaped you moving forward. You want to make sure you highlight your understanding of the MD/PhD career path as well as your passion for it. It is important to be clear, direct, and concise with the points you make and remember to focus on answering the question.

When discussing your research background, it may not be necessary to include much detail, depending on the word limit of the essay. Also, when discussing your PhD research interests, most schools do not ask for a project proposal, so providing brief insight into your field of interest and briefly describing your research goals in that field is the best approach. It is normal to not know exactly what research you want to pursue at the time of applying and having an open mind is helpful in finding the right fit. It is sometimes the case that the research you propose in your application is not what you end up pursuing. This is okay; however, it is important to express what you are genuinely interested in so that the admissions committee can get to know you better.

Overall, these essays are an important part of the application since the admissions committee will be able to get a better idea of who you are and what your interests are. It is also a great opportunity to demonstrate your passion and understanding of the MD/PhD career path. Many

applicants may want to focus on trying to stand out in their essays, however, if you are showcasing who you genuinely are, then you will stand out!

MD/PhD Interviews

If you have received an MD/PhD interview – well done, that is an accomplishment in itself! You are one step closer to your goal! You will notice that the MD/PhD interview session is in addition to the MD interview session. These interviews may be scheduled on the same day or on separate days. The format of the MD/PhD interview may be a series of multiple short interviews, or a panel in which you would need to present a short presentation (prepared in advance) plus a question period.

As you prepare for the interview, it is useful to think about why the program even interviews applicants. This is so that they can evaluate your communication skills, professionalism, and maturity; to hear your motivation to pursue medicine and science in your own spoken words; to hear your experiences and how it has confirmed your desire to become a clinician-scientist; to learn if you have realistic expectations of the career and the work-life balance; and to decide if you are going to be a suitable future colleague and peer that is enjoyable to work with.

The tips for your MD interview will also apply to your MD/PhD interview, but there are a number of ways in which the MD/PhD interview process is different. For instance, be prepared to speak about your research at different levels, for example, prepare an “elevator speech” (90-second duration) to describe your research to a non-expert audience. It would help if you also were comfortable to discuss your research with an expert in the field. Additionally, as previously mentioned, you should perform thorough research on the career to understand the profession and the expectations from it. Also, it is ideal to have some knowledge of the specific MD/PhD program you are applying to (how the program is structured, what resources are available, etc.) and how you envision yourself succeeding in it.

In terms of the PhD research you want to pursue, it would be helpful to identify a few Principal Investigators you would like to work with. More thought into the research field and questions you want to pursue can positively demonstrate your passion and critical thinking.

On a more general note, it is important when preparing for your interviews to start early and practice often! Practicing with as many people as possible can help you recognize different perspectives and provide you with more comprehensive feedback. Try to practice as many questions as you can but know that you will not be able to practice for every possible question, so becoming comfortable with spontaneity is imperative. Lastly, remember to be genuine with your responses and be confident – this is the final stage to showcase yourself as an ideal MD/PhD candidate!

What comes next?

We recognize that thinking about an eight-year program after undergrad sounds daunting itself, let alone thinking about what comes after that! However, a common thread of conversations with both our research and clinical mentors is that the MD/PhD program (and med school in general) -- is just the beginning of a deeply fulfilling and meaningful career! In this section we aim to offer some insight into what that looks like. First, we begin by outlining the most likely pathway for MD/PhD graduates, further clinical training in the form of residency and fellowship to become an independent clinician-scientist. Next, we outline 'non-traditional' career paths other than that of a clinician-scientist in an academic medical centre. Finally, we end our chapter by sharing some brief messages from clinician-scientists across the country.

Walking further down the clinician-scientist pathway:

The majority of MD/PhD trainees in Canada and the United States pursue further clinical training after graduation. In a Canadian survey of MD/PhD program alumnae published in 2017, 99% of respondents had either completed or were currently in a residency program while 82% completed at least one fellowship program [[CMAJ Open Paper](#)]. The primary objective of residency programs is to train competent, independent clinicians--however, many residency programs incorporate some time for research. The

amount of research time allocated during fellowship (i.e. subspecialty training programs) is often higher than residency and some MD/PhD alumnae also pursue a post-doctoral fellowship. Science moves quickly and MD/PhD trainees must be aware that it takes special efforts to remain connected with their scientific pursuits during the busy years of focused clinical training! All-in-all, the median training time for MD/PhD alumnae in Canada was 13.5 years [[CMAJ Open Paper](#)]. Following their training, 83% of respondents were appointed as faculty at an academic medical centre [[CMAJ Open Paper](#)]. They balance their time by conducting research, caring for patients, teaching trainees (from medical students to advanced subspecialty fellows) and various other administrative duties.

While a detailed overview of American MD/PhD programs is outside the scope of this resource, American ‘Medical-Scientist Training Programs (MSTPs)’ have been well studied [[JCII Paper](#)]. Some challenges for MD/PhD graduates are universal, such as financial constraints and not enough protected research time during clinical training to remain productive scientifically. In both Canada and the US, there are active calls to support MD/PhDs as the links from the “bench to the bedside” and drivers of clinical breakthroughs.

“Physician-scientists are among the most highly trained investigators in the research enterprise. Their efforts will be crucial to improving health care. Our world needs a growing, corps of professionals who bring a human understanding of patients to medical research, and a researcher’s expertise to improving patients’ lives.”

Jain, Yamada, and Lefkowitz -- [“We Need More Doctors Who Are Scientists”](#), *The New York Times*

Some resources for further reading include:

[The national MD-PhD program outcomes study: Relationships between medical specialty, training duration, research effort, and career paths](#)

[Perspective: The Successful Physician-Scientist of the 21st Century](#)

[Saving the Endangered Physician-Scientist — A Plan for Accelerating Medical Breakthroughs](#)

A fork in the road - non-traditional career paths for a clinician-scientist:

While the majority of MD/PhD alumnae enter careers as academic clinician-scientists, we briefly wanted to outline other career possibilities. These other career paths are not unique to physician-scientists, but also to our peers in clinical medicine and pure scientific/biomedical research. These careers outside academia and academic medicine include:

- entrepreneurship,
- management consulting and wealth management,
- venture capital,
- pharmaceuticals, biotechnology, digital technology,
- healthcare and non-profit management,
- humanitarian response,
- education,
- and more!

The reasons why MD/PhDs choose to enter alternative career paths are varied and often personal. However, what we wish to stress is that training in an MD/PhD program offers you skills that allow you to: identify meaningful problems, make sense of the intricacies around these problems, test your assumptions, generate new insights, design solutions, and translate them into real-world impact. These skills are extremely highly valued, no matter what field you choose to enter. A unique draw to a career as a clinician-scientist is that you are bound to have outlets to explore your interests and curiosity as they evolve over time. Many clinician-scientists spin-out their research into start-ups, consult for various companies, lead organizations, and more over the course of their careers. To use the old cliché, the world is your oyster.

When thinking of career paths, the authors have found the ‘careers blogs’ of Nature and Science to be invaluable resources of information, inspiration, and validation. Both journals also offer podcasts (Nature has one general podcast, one specific to career advice, and Science has one) that showcase innovative research across scientific disciplines. HelloPhD is another useful podcast for grad students, but has a strong American focus.

Some resources for further reading include:

[Alternative career paths for PhDs: a round-up from Nature Careers](#)

[From Doctorate to Data Science: A very short guide](#)

[Leaving academia](#)

[The Science Careers guide to consulting careers for Ph.D. scientists](#)

-

Words of Wisdom:

< sending out email to MD/PhDs across Canada on 15th >

Subject: Brief Message to Students Considering a Career as a Clinician-Scientist

Dear Dr. _____,

My name is Vinyas and I'm a third year MD/PhD student at the University of Toronto. I am reaching out to you on behalf of a group of students who are currently writing a resource for Canadian students applying to medical school. This resource will be published freely online as a PDF and is meant to provide students in high school and undergrad who may not have access to mentorship in the health sciences with information about the path to becoming a physician. It is our hope that such a resource will contribute to ongoing equity, diversity, and inclusion efforts in our profession.

There is a chapter focused on MD/PhD programs that I am helping to compile and we thought it would be meaningful to include brief messages from clinician-scientists to these students to end off this chapter. It does not have to be long, just two to three sentences about why a career as a clinician-scientist has been meaningful to you. Please feel free to forward this email to any colleagues who may be interested in contributing.

I look forward to hearing back from you.

Best wishes,

Vinyas

Chapter

8

Interviewing

The interview process can be a daunting experience but is also an exciting opportunity to display your strengths as a future medical student. This chapter will give you an overview of the various types of interview formats, and how you can prepare for them. It will explore how to practice in advance and up to the night before and discuss how to confidently and professionally present yourself. Specifically, this chapter will cover how to dress, communication skills, and where to stay during your interview.

Chapter 8 – Interviewing

AUTHORS:

Kianna Cadogan, Mathew Daniel, Ola Sobodu

Interviews are a crucial aspect of the application process. Being invited to interview is an indication that the medical school you have applied to is interested in learning more about you! This is your chance to showcase who you are and to highlight your interpersonal skills.

Types of Interviews

Traditional/Panel Interviews

These interviews are the OGs of all interviews. Traditional interviews consist of a meeting between the interviewee and 1 or 2 interviewers (traditional) to up to 3-4 interviewers (panel). Usually, the interviewers would be formed by faculty, upper year medical students and, sometimes, members of the community. Through light discussion and a series of questions and answers, the school representatives will be able to get a better picture of who you are as a human, why you've decided to pursue medicine and if you are a right fit for their program.

MMI

The MMI, or the Multiple Mini Interview, is a relatively new way of evaluating candidates that was created at McMaster University School of Medicine in the early 2000's. Since its creation, it has been widely adopted by many schools within Canada and the US. It is believed to foster a more representative view of a candidate's soft skills (e.g. communication, teamwork, leadership) and believed to be less prone to biases due to the use of multiple independent interviewers, compared to traditional one on one or panel interviews.

The MMI consists of a series of stations where each station will prompt you to either answer a question (written or verbally), collaborate on a particular task, or role play with an actor. Some institutions will give students an idea of what to expect during their MMI, so if you are unsure, reach out to your respective Admissions Committees to get an idea of the type of stations you can expect at your interview. The standard MMI format is that you will be given about 2 minutes (amount of time allotted will vary between schools) to read the prompt and formulate your response. Once the 2 minutes are up, you will be instructed to enter the room and share your response with the interviewer. Your discussion with the interviewer will be about 8 minutes in length, so the total time at a station is roughly 10 minutes. Once the time is up, you will leave the room and proceed to the next station; rinse and repeat until you are through all the stations. The exact format and timing is school dependent and may vary, but they typically follow this base structure.

Each station is assessed by a different interviewer, thus reducing potential biases from the same interviewer assessing all your stations. The stations where you are asked to answer a question typically involve ethical dilemmas, current issues (especially in health care), interpretation-based questions, or personal questions. Some general examples of the topics can be seen below:

- Ethical dilemma, e.g. you catch your friend cheating on an exam
- Current issues, e.g. abortion, MAID, Indigenous health
- Interpretation-based, e.g. interpreting a quote or picture
- Personal, e.g. tell me about your strengths/weaknesses

Collaboration stations typically take the form of completing a task (e.g. a puzzle) with another person while being assessed by the interviewer. These types of stations assess communication, teamwork, and leadership. Usually the emphasis is on assessing your ability to work in a team and communicate with the other team member to complete the task in an accurate way, with less emphasis placed on completing the task in time. This station can show the interviewer that you are a team player, you communicate well, are receptive to feedback and capable of adapting if

things don't work as planned or based on the feedback from the other participant. These are all critical attributes to becoming a good physician!

The role-playing station is exactly what it sounds like. The prompt will explicitly tell you what is expected of you and put you in a situation where you will be interacting with an actor and being assessed by the interviewer. Here, the interviewer will be assessing you for many competencies (e.g. CanMEDS Framework), it really depends on the exact situation, but communication is the most common component being consistently assessed. These role-playing stations can take the form of you breaking bad news, diffusing a conflict situation, comforting a friend going through a tough time, giving advice, etc.

Tips on how to prepare for the MMI, practice questions, and other helpful resources can be found later in the chapter!

Modified Personal Interviews (MPI): See the "University of Toronto" School-specific section.

Group Interviews

Teamwork is an integral component of medicine as physicians rely on various healthcare professionals to provide multidisciplinary care for patients. Medical schools may use a group interview to assess your ability to work in a team setting. For example, you may be asked to work alongside other candidates to solve a problem during the allotted time.

The size of the group you interview with may vary depending on the school, but typically range between 5-7 interviewees. An interviewer may provide instructions to the group, or a prompt may be provided for each interviewee in the same way MMI prompts are administered. Remember that interviewers are assessing your ability to work in a team-setting, therefore it is very important to share your thinking with your group while also providing space for others to share their thoughts as well. Above all, it is important to be kind and to support your team!

School Specific Points

The University of Toronto (U of T)

Similar to many other medical schools, getting an interview is often referred to as the hardest part in your journey to medical school. The interview selection process is rigorous and once you receive an interview invite, you have close to a 1 in 2 chance of receiving an acceptance! The time at which you receive your interview - be it in early February or late March - is in no way reflective of your file review score. Overall, the timing of your interview does not impact your chances of being accepted post-interview so bring your "A game" no matter what.

U of T employs a modified personal interview (MPI) format. This consists of four independent interview stations, each lasting about 12 minutes, assessed by four different interviewers, with a 3 minute break between stations. An MPI is as a cross between the MMI and panel style interviews. It consists of relatively short one-on-one interactions permitting a more personal and conversational tone similar to a panel while having independent stations similar to an MMI. Note that there are no stations involving role-play, collaborating with other applicants, and there is always one assessor in the room.

These 12-minute stations consist of questions, follow-up questions to those, and if time permits, you will also be presented with the opportunity to ask questions of your own. Each station follows specific guiding themes, and based on the station, there is a mix of standard questions as well as those that are more specific to your application. It would be helpful to familiarize yourself with U of T clusters (professional, advocate, scholar, communicator/collaborator/manager) as well as the CanMEDS framework. This will give you an idea of the sort of qualities the program is looking for, and can provide a to framework within which to reflect on your experiences.

According to the University, the goal of the MPI is to learn more about each applicant and assess whether they possess the qualities necessary to be successful in the medical program. Since

interviewers are from U of T's medical community, the one-on-one interactions also provide an opportunity for applicants to learn more about U of T's medical school. Interview day at U of T also consists of time outside of the interview. It is a half-day affair that includes campus tours and information sessions with faculty and current students. Outside of the MPI itself, you will be interacting with other applicants, and current students and staff. Thus, even though you are not being actively assessed during these times, it is important to always present your best self forward.

University of Manitoba

At the University of Manitoba the Multiple Mini Interview (MMI) is used for all applicants. For information on the format of the MMI please see the MMI section!

There are 12 MMI stations which includes 1 rest station and 1 written station. You require a passing mark on 9/11 stations, a total MMI score greater than 2 standard deviations below the mean, and a mean score acceptable to the Admissions Committee in order to be eligible for admission. All applicants who are applying in the Bilingual Stream (French/English) will have MMI stations conducted in French as well. The MMI is worth 35% of the total score for admission.

Canadian Indigenous applicants who wish to be considered in the Canadian Indigenous Applicant Pool will do both an MMI and a panel interview. For more information on the panel interview please see the panel interview section!

For more information please see the U of Manitoba application bulletin. Link below!

¹http://umanitoba.ca/student/admissions/media/medicine_bulletin.pdf

University of Ottawa

In order to choose their candidates, the University of Ottawa conducts traditional panel interviews. The panel is composed of a faculty member, a 4th year medical student and a community member (usually, another MD). The day of your interview, you will have to arrive 45 minutes prior to your interview and you will be welcomed by snacks and be sitting with other interviewees and some medical students. You'll have the chance to relax, meet potential future classmates and ask some questions about the student life.

The interview itself lasts 40 minutes. They offer interviews both in French and in English. However, the language of the interview will be concordant to the MD language stream you've applied to. If you had checked the box indicating you are bilingual in your application, know that they will ask you a question in the opposite language. Even when it seems like a lead to discussion, the purpose of this question will mostly only be to test your linguistic fluidity. Otherwise, the interview is as traditional and classic as it gets. You will be asked questions relating to your motivation to study medicine, your personal attributes, your ability to think critically through ethical scenarios and your conflict resolution skills in role-play. They will also have on hand your autobiographical sketch (ABS) and may directly ask questions about your past volunteer experiences, leadership engagements and/or your research. Knowing this, you should anticipate some of the questions you will be asked and prepare beforehand. Know your 'why' for pursuing medicine, be able to show passion and introspection when speaking on your past experiences, read and reflect on ethical issues, and be informed on current events and health topics.

Understandably, panel interviews tend to be intimidating. To help candidates mitigate their stress, 1st year medical students at the University of Ottawa usually offer in-person mock interviews around February for a small price (all proceeds go to charity!). The Black Medical Student's

Association at the University of Ottawa also offers mock interviews for free to minority students. These opportunities are incredibly valuable and highly recommended!

UDEM, ULaval, UdeS

The interviews take place in Montreal, Québec city or Sherbrooke. The interview location is chosen randomly. You will pass one interview and the result will be transmitted to the three medicine programs. The interviews will take place in French only. If French is not your first language, it's important to practice during the weeks leading up to your interviews. Some interviewers might speak or understand English, but again, all the interviews will take place exclusively in French.

The interviews take place in MEM (Mini-Entrevues Multiples) format. There will be role-play situations, task completion stations and discussion situations. There are 10 stations during which you will be allotted two minutes to read the situations in front of the door and seven minutes to do the interview itself. After five minutes inside the interview station, a bell will ring. If you are in a role-play situation or a task-completion station, the remaining two minutes will be spent responding to the evaluator's questions in order to explain your reasoning.

During the role-play situations, the interviewer will be in the room, observing your behavior. You are not to interact with the evaluator until the last two minutes, during which you respond to his questions.

Since you do not submit CVs or letters or motivation before Quebec's francophone interviews, the interviews are the only moment to speak about your past experiences, your motivation, your community involvement. Therefore, the evaluators will try to get to know you and your personality.

McGill University

McGill University uses the MMI format and interviews are conducted in the Faculty of Medicine's Steinberg Centre for Simulation and Interactive Learning. These mini-interviews consist of approximately ten stations that can be task-oriented, simulation- or scenario-oriented, or discussion-oriented. Stations are designed to evaluate the various abilities and skills that form the basis of the Physicianship curriculum component, which in turn references the CanMeds roles developed by the Royal College of Physicians and Surgeons of Canada. There is also a rest station at some point in the interview.

Interviews are held in February for candidates applying through the undergraduate stream and in March for those applying through the CÉGEP stream. Students can choose ahead of time to do their interview in either French or English.

University of Saskatchewan

The University of Saskatchewan hosts its MMI around late March of every year in Saskatoon, Saskatchewan. The interviews are conducted in English. There will be 12 interview stations, and each station runs for about 10 minutes (2 minutes to read the scenario, and 8 minutes to answer the question). Of these 10 stations, there is a rest station and a written station.

The following are some of the type of topics asked at the University of Saskatchewan:

- Ethical Decision Making
- CanMEDs roles
- Role-play
- Current events
- Knowledge of the Healthcare System
- Interpersonal/Communication
- Personal

Similar to other universities, the University of Saskatchewan does not ask for CV, letters of support, or research papers, etc., in their application. Additionally, the MMI makes up 50% of the application weight, while the UAA is 30% and the MCAT is 20%. Therefore, this is an important opportunity to showcase your extracurriculars, work and volunteer background, research experience, and general life experiences.

University of Calgary

The Cumming School of Medicine conducts interviews in late February to mid-March in Calgary, Alberta. Once you arrive, you will be assigned to a group with a Team Lead (usually a first or second year medical student) who will take each of you to your first station. This will be the beginning of the interview circuit which includes MMI stations, a group interview and a panel interview. Each interview will be approximately seven minutes, with two minutes to prepare totaling nine minutes per station. However, it should be noted that you may not be provided two minutes to prepare for the panel nor the group interview stations.

As you prepare for your interview day, it will be helpful to read through the competencies that the school will be screening for, which can be accessed via the following link: <https://cumming.ucalgary.ca/mdprogram/future-students/admissions/mmi-information>

Once you complete the circuit, you will be invited to tour the school with your Team Lead and fellow candidates. Even though your interview will be completed at that point, it is important to remain professional at all times.

Dalhousie

Dalhousie offers an interview invitation to all eligible Maritime applicants and approximately 60-100 eligible Non-Maritime applicants depending on the number of applicants and interview capacity. For Non-Maritime applicants, interview selection is determined by GPA, MCAT, CASPer and the supplemental application, specifically the applicant's reason for choosing Dalhousie. Interview invitations are typically distributed via email in October with the Interview usually

scheduled for the last weekend in November. Interviewees are given the choice of interviewing at either the Saint John campus in New Brunswick, or the Halifax campus in Nova Scotia. However, the choice is on a first-come-first serve basis as there are limited spots available at either location. The interview invitation will include instructions on how to schedule your interview at either location, and at various time slots.

Dalhousie utilizes the MMI format solely, with 10 interview stations and 2 rest stations, each lasting 8 minutes and a 2-minute transition between stations. The interview runs for approximately 2 hours. The interview stations cover a range of scenarios with the goal of assessing the applicant's motivation, compassion, ethics, teamwork, awareness of societal issues, critical thinking, problem solving, and communication skills, among others. However, they do not assess any scientific knowledge. In each station you will typically be interacting with or observed by a single rater. In stations you may be asked to discuss a topic, ethical dilemma, problem solve with another applicant, or even role play.

Overall, interviewing at Dalhousie can be a pleasant experience. Everyone including volunteers, interviews and administrators are all quite friendly. The key to a successful interview day is to be prepared, believe in yourself, and just go into each station to have a conversation and be yourself. Also, don't forget to smile!

Lastly, be sure to look on the Dalhousie website as there is usually a page with additional information on the MMI, tips on how to prepare, and even sample questions!

How to Prepare

General tips

Be on time. Be confident. Be yourself. Smile. Prepare your attire and any documents you may need to take with you in advance. Make yourself a checklist if necessary to make sure you don't forget anything.

Where to stay

If your interview takes place in the morning, it's strongly recommended that you arrive at the city at least the night before and book a hotel or motel room close to the location. This will not only help you to de-stress and feel more relaxed, but it will also help you avoid any traffic or mechanic issues that could happen the day of.

What to wear

First impressions are important! Therefore, it's important to feel comfortable. Having a nice outfit helps build your confidence, which will help you perform better during your interview.

Most of the gentlemen wear a blazer and a tie or a nice shirt and dress pants. Just remember:

- Neutral colored socks
- Avoid or be mindful of using cologne as many people have scent sensitivities
- A nice dress shirt with a matching tie
- No Jeans! Dress pants are typically worn
- Comfortable dress shoes

As for the ladies, it would be best to wear flat heeled shoes to be as comfortable as possible. Indeed, some interview formats, like the MMI's will require you to stand for a big part of the interview. Here are some ideas:

- A professional skirt (no mini-skirts!) or pants and a blazer
- A professional dress
- A suit

Budgeting tips

Before you go out and buy an interview outfit, check your closet to see if you already have items that could suit the occasion. Also, don't be shy to borrow some items if you can't afford to buy them. For example, you may borrow a blazer from a friend. Also, be sure to check out your local thrift shops. You can often find dresses and skirts at an affordable price. Renting suits is also an option for men.

Even if it is an additional expense, if you think it could affect your stress level the morning of the interview, we would recommend arriving the day before your interview. Some budget-friendly options may be renting an Airbnb or a motel room versus an expensive hotel room. You could also stay with family or friends that live close to the location.

Weeks Before the Interview

Okay, so you found out you got an interview, congratulations that's great! What should you do leading up to the interview? Elsewhere in the chapter you'll find information on tips for how to prepare for the MMI. What else should you do?

1. Stay up to date on current events - read the news. Think about what's going on in the world and how you feel about it. Current events are great topics for your interview so it's good to have an idea about what's going on before your interview.
2. Start having discussions with your family or friends about current world issues. This is really good practice for what an interview scenario might be like.
3. Figure out what you're going to wear for your interview. More info on this in the section in the chapter! But, it is a good idea to think of this well ahead of time in case you need to make any alterations, which could take some time, before your interview day.
4. If you have a morning interview start waking up at the time you will need to wake up on your interview day. That way you can get used to waking up early and you don't feel tired on the day of your interview.

Days Before the Interview

Your interview is just a few days away! You've been practicing hard for weeks now what do you do the days before the interview?

1. Ease up on the practicing a bit. You want to be well rested for your interview and you've already done all the work! Try doing some things that help you relax. It's okay to still practice a bit, but start to dial it down.
2. Plan out the day of your interview. Think about what you're going to eat, how you're going to get there, where you're going to park, how much time you'll need to get ready and travel there. Planning all of this days in advance will relieve a lot of stress on your interview day.
3. Get a good amount of sleep the days leading up to your interview.
4. Most importantly, try to relax a bit and de-stress before your interview. I know this is really difficult, but your interview will be nerve-racking- no matter what. It's best to try and reduce the amount of stress you go in with as much as possible. Try to think about your interview as a simple conversation you're having with someone. You've worked hard to get where you are and you're prepared! Go in and do what you're prepared to do with confidence!

Strategies After the Interview

You're finally done your interview! Congratulations! What now? First of all, do something for yourself. For most medical schools this is the last step you need to get over for your application. The fate of your application is now out of your hands. For some this sounds great - you've done all the work and now it's just time to wait. For others, this can be really stressful because there is a sense of loss of control because there isn't any more you can do to improve your application and most medical schools make you wait months before you find out if you are accepted or not. So, what should you do after your interview?

1. Try not to think about it for a bit. The interview is probably ALL you've been thinking about for months. Think of some fun things to do that can distract you from the interview.

2. Try not to over-analyze your interview. There will always be things you wish you had said or things you wish you said differently. Nobody is going to be perfect in their interview. One of the positive aspects about many interview formats that include independent stations is that doing poorly on one part of the interview does not carry over to other parts of the interview. Each part is evaluated separately and with different interviewers. Even if you felt like you were not perfect in a traditional/panel interview without multiple stations, remember that no one is perfect, and no one expects perfection. Don't sweat it.

3. After a good amount of time taking some well-deserved rest time. It may be time to think about the future a bit. Plan for multiple scenarios. Plan for things if you get into medical school, but also plan what you can do if you don't get in and think of what you can do differently if you apply again. This can help relieve some stress because then everything isn't riding on one outcome. Obviously, you want to get in, but if you don't it is not the end of the world. There are still many things you can do with your year off and you can apply again the next year as a stronger applicant. Some things you could consider are other programs you want to apply for, if you are going to work instead of go to school, if you want to write the MCAT again, if you want to do any travelling. Unfortunately, schools often let people know late whether you're accepted or not so it's always good to plan ahead of time for all scenarios.

Chapter

9

Accepting your Offer

In your path to a career in Medicine, there will be many big milestones with one of the biggest being your acceptance into Medical School! Your emotions may overwhelm you on this fateful day, and rightfully so. But, do not forget you have to actually accept your offer in order to say you're officially a Medical student! This chapter will outline the steps to do just that as well as provide a framework with which to potentially decide which school is the best if you have received multiple offers. Keeping mind that this journey is a marathon and not a sprint, this chapter will give insight on how to navigate through the potential reality of being waitlisted or rejected.

Chapter 9 – Accepting your offer

Authors:

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You got into one medical school

Congratulations! You got in! Take some time to celebrate this incredible moment. All this hard work has finally paid off. You deserve all of this. Share the good news with your loved ones and get ready for this new exciting and demanding chapter of your life.

Take some time off to relax and destress after the ordeal that is application. Some people often find pleasure or satisfaction in taking a part-time job, traveling, or learning a new skill they have been pushing aside.

It might also be time to consider some factors such as temporarily relocating to another city, tuition, and housing. If you have a partner, are married, or have children, it will be helpful to start making plans especially if the school you got accepted into is in a different city. There are several issues most schools are willing to provide guidance on but if there are any niche questions or challenges you may have, it would be a good time to get in touch with the registrar of Undergraduate Medical Education program at the university you just gained acceptance into.

You got into multiple medical schools

If you got more than one acceptance, you rock! However, this can be a bittersweet feeling since you now have to choose. Sometimes it is easier when things are decided for us and we just roll with it, but in this case, you may have some serious thinking to do. Choosing the school where you

will be spending the next three or four years of your life is not a decision that should be taken lightly. Many factors should come into consideration during your thought process:

- The cost of education.
 - How expensive is the school tuition? Can you afford it?
 - Were you offered scholarships? Financial aid?
 - Will you require loans?
 - If you would require loans (especially with American medical schools), does the school have a loan program?
 - How much financial support will you be able to get from family with regards to paying for your education and other living expenses

- The location.
 - Location is a very important factor to consider when deciding on which medical school offer to accept. Reasons may vary with regards to why individuals choose some programs over others but with regard to the location some important questions to consider are: whether the school located in your hometown, where most of your friends and family live and how far is the school from your home? If you are not ready to leave your hometown just yet, choosing a school in the city or town you live in may seem like a more viable option. Nonetheless, it is very important to have a support system when in medical school and if location plays a very important factor with regards to your support system then it is worthwhile to give it much thought.
 - Do you want your medical education to occur in a small town or you prefer the hustle and bustle of a large city?
 - If you have to move, will you be financially stable enough?
 - Do you like the city the school is in? If you like going out, how is the night life? If you are a foodie, how will your culinary experience be? Remember that as much as

you will study in medical school, you'll also need to find a balance with all the other aspects of your life and take time to enjoy the present.

- The duration of the program.
 - While students may pursue the “conventional” path before medical school by completing an undergraduate degree in any discipline of their choice before applying to medical school (exceptions for Québec and for students applying out of their third year of undergraduate studies), others may have pursued other careers, or furthered their academic studies before considering medicine.
 - For others who have pursued other careers, academic programs, or have specific academic and professional goals, knowing the length of duration of the MD program, is additional information that should be taken into consideration when deciding which offer to accept. Most MD programs range from 3-5 years in terms of duration.
 - If you are a student who got accepted into an MD-PhD program, it is expected that completion of your program will certainly have a longer duration. PhD studies can have variable ranges depending on several academic and non-academic factors. It is therefore important to ascertain the accommodations that your school has in place for MD-PhD students in relation to program duration when accepting your offer.

- The pedagogic approach/program structure/evaluation methods.
 - Some schools have a more “self-learn-hands-on” or “flipped-classroom” approach in addition to problem-based learning which requires more self-discipline and resourcefulness but might be interesting if magistral classes were never your strong suit.
 - Other schools utilize a more classic teaching approach where lectures for the majority of how educational content is delivered and some people may prefer this mode of teaching.

- However, most programs will have some form of structured clinical teaching, but many will differ with regards to how students are evaluated with regards to their clinical skills.
- While some programs carry out few tests or evaluations during a semester, other schools may have more frequent tests (e.g. bi-weekly or bi-monthly). Therefore, some questions to consider are:
 - How is the clinical exposition and how early does it begin?
 - What kind of assessments methods do they use and how often are assessments carried out?
 - Are most students generally satisfied with their medical education?
- These questions are not the only ones that you can think of but it is important to know how you learn best and which school's pedagogic approach will maximise your performance and learning experience.
- The opportunities in and outside school.
 - Does the school offer some flexibility during the journey, MD-MSc programs, sabbatical semester/year, concomitant athletic career, etc?
 - Does the school offer research and international opportunities? Study abroad programs?
 - Does the school offer services to the students in need? This includes support for mental health issues, financial difficulties, and academic obstacles.
 - How does the school support their clubs in their university, and do they support student led initiatives?
 - Are there opportunities to get involved in volunteer or community service work?
 - It is easy to gain clinical exposure in the academic and community hospitals outside school?
- The values and plus-value of the school.

- Does the school value the importance of diversity among its students? Are there any policies ensuring that ethical and ethnic responsibilities regarding the courses and opportunities are met? Do the students attending the school have different backgrounds? Are ethnic/cultural minorities, women, and LGBTQ+ students represented? What is the school's mission?
- How is the school life outside classes? Is there a lifting school spirit? Are there committees or interest groups that align with your personal and/or professional interests? How is the atmosphere/learning environment? Is it competitive or more friendly?
- As elitist as it may sound, how well known is that school? Keep in mind that regardless of the medical school you're going, at the end of the day you will still be a doctor but it cannot hurt to look at the CARMS match rates from the school or do some research on the school's renown. Basically, look into the academic quality of the school. Where does the school rank among others in the country or internationally? What percentage of students graduate from the program?
- The building itself might be something interesting to look at since a lot of your time will be spent there. Is it newly renovated? Is it on the other side of campus? Are all your classes in the same building? These are very meticulous details that might not sound very important now but will be on a day-to-day basis once you're enrolled.

You got waitlisted

If you are on the waitlist, good job. Do not mistake a waitlist for a rejection (or an acceptance). For some schools, people that are further down the list still have a fighting chance to get in as other candidates decline their offers. Generally Canadian medical schools do not allow the submission of more information after the application process has been completed. However, you should take some time to appreciate your efforts and reflect on the process. When it comes to American medical schools, you have the chance to send in secondary information such as a letter stating

despite being on the waitlist, why that school is important to you as well as any other activities that you have been up to that show why you would be a perfect match for that university.

But the most important aspect about being on the waitlist is to have a plan while remaining hopeful and positive. It is crucial to know what your next step will be in case it does not work out. Please see “You didn’t get in now what?” chapter for more information.

Conclusion

These are all very important questions you should ask yourself but the most important question you need to ask yourself will always be: would I be happy and fulfilled in this school for the next 3,4, or 5 years?

Wellness in The Process

In your path to a career in Medicine, there will be many big milestones with one of the biggest being your acceptance into Medical School! Your emotions may overwhelm you on this fateful day, and rightfully so. But, do not forget you have to actually accept your offer in order to say you're officially a Medical student! This chapter will outline the steps to do just that as well as provide a framework with which to potentially decide which school is the best if you have received multiple offers. Keeping mind that this journey is a marathon and not a sprint, this chapter will give insight on how to navigate through the potential reality of being waitlisted or rejected.

Chapter 10 – Wellness in the process

Chapter Authors:

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Relationships and Support System

The journey to medical school (and beyond) is a long and often lonely process. While everyone's experience varies, one of the most important ways that students ensure their well-being throughout the admissions process, and during medical school, is by focusing on developing a robust support system. Depending on where you are in your life, this support may come from a significant other, parents, siblings, roommates, friends, mentors (within or outside of medicine), or other applicants. The importance of developing this support system and working to maintain it throughout the application process, and later medical school, cannot be understated. This journey will not end when you finish the MCAT, get an interview, or even receive your admissions offer. It is a continuous process where you will inevitably need to rely on the support of others to succeed.

It is easy to lose sight of the value of spending time with other people when you have thousands of MCAT practice questions to do, you still have no idea what organic chemistry is, and you keep falling asleep while reading *Doing Right*. While spending time with others may not feel productive, efficient, or useful at times, it is essential for ensuring your long-term health and performance on top of being a more enjoyable way to live your life. These relationships and time away from the sometimes all-consuming process of applying to medical school will help sustain you and allow you to maintain higher productivity levels while studying and preparing for other parts of the application process.

Whether you end up 'drifting apart,' 'don't have time for a relationship,' 'they don't understand what you are going through,' or any number of other reasons maintaining relationships while

applying to, and attending, medical school, is difficult. Some relationships will be strengthened by the process, and others will, unfortunately, meet their end. We are not here to tell you how to manage your relationships, but it is essential to recognize that both friendships and romantic relationships can play a significant role in the success of many applicants.

Going through this process is difficult, nobody will question that, but we must acknowledge that these times can be equally challenging for the people we are close to. Recognizing this and working to ensure lines of communication remain open, even if the time you can commit to the relationship has decreased, is critical. Finding less time-consuming ways to show your significant other you still value the relationship can be particularly helpful. This will vary widely but could mean anything from scheduling a semi-regular date night or even taking a few minutes every night to unwind and watch Netflix with them. The specifics are less important than the gesture and being truly present with them when you are together.

As you move forward with your application, and eventually, medical school, remember that we live in a bubble and often family, friends, and significant others do not live in that same bubble. Next time you are with someone from outside of your bubble instead of talking about your MCAT score, your new record typing speed you think will help with CASPer, or how amazing your latest research project is, try focusing on that person and asking about their life. There is a time and place for those conversations, and you should not feel like you can't talk about it, but we must all take a step back from time to time. Be present in your life and relationships. It will not only benefit your own well-being but also improve your relationships and allow you to work more effectively over time.

Burnout

Burnout is a state of physical, emotional and mental exhaustion caused by prolonged stress. Life is a marathon, and if you are living each day like a sprint, overcommitting and taking on far beyond your capacity, you are bound to reach a breaking point. Burnout is particularly common among

pre-medical students due to the high expectations from medical schools, such as competitive MCAT scores, high GPAs, and strong extracurricular records. These requirements undoubtedly contribute to the stress many pre-medical students experience. Students begin to feel the need to overwork themselves in order to accomplish their goal of becoming a physician. However, many students push themselves to a point of prolonged stress and exhaustion, ultimately resulting in burnout. Having been through the application process and successfully gotten into medical schools, we can confidently say that overworking yourself past your breaking point is not worth it. Taking care of yourself and your health should take priority. Remember, you are human first, before a student or anything else, prioritize accordingly.

To help prevent burnout, here are some practical tips and approaches you can adopt:

- i. **Rest, Recharge, Repeat:** The first step to preventing burnout is incorporating time to rest and recharge into your routine. Our current work climate, including the field of medicine, has subconsciously encouraged busyness as a metric for productivity. However, the true metric for productivity is finding harmony between staying busy and taking much needed breaks. To be intentional about resting and recharging, reflect and figure out the things you enjoy. These can include major activities such as reading books, watching TV and dancing, or smaller less time-consuming activities such as staring at dog photos, online window shopping and listening to music. Once you have figured out the activities that bring you joy, incorporate these into your routine the same way you schedule time for assignments and classes. This could be following an online dance video at home, incorporating breaks into your study time to look up dog photos, or combining two activities in one, like watching your favourite show while running on a treadmill. In addition to activities you enjoy, schedule free time. Take power naps, sit in silence, be alone with your thoughts, just relax.
- ii. **Know Your Warning Signs:** A very important tip to prevent burnout is figuring out your warning signs. Take a cell-phone for example, most phones notify you when the battery is low. The notification is a warning sign reminding you that your phone needs a recharge.

Like phones, most individuals have warning signs to indicate when a recharge or break is needed. Take the time to reflect and be observant in order to figure yours out. These warning signs manifest differently in everyone, and may include self-isolating from friends and loved ones, discontinuing activities you enjoy or adopting unhealthy coping mechanisms. The important thing is figuring out your own warning signs and taking the time to address these signs as they appear. Just like you do not wait until your phone battery is completely dead before charging, do not wait until you are completely burned out before taking a break.

- iii. **Unlearn Unhealthy Habits:** This tip is as straightforward as it sounds – unlearn your unhealthy habits. While this might not be an easy process and one that requires patience, it is paramount to preventing burnout. Constantly surviving on three hours of sleep, overloading on cups of coffee with a sprinkle of unhealthy eating habits screams recipe for disaster. Do not be fooled that sleep is unnecessary because articles tell you that most billionaires wake up by 4am. First, you are not going into medicine to become a billionaire (at least you shouldn't), but to help and support future patients. Secondly, what these articles do not mention is the plethora of resources available to these billionaires to support them in their day-to-day chores and activities. Lastly, look closely at the times that these billionaires go to bed in order to wake up at 4am. Their bedtimes are often excluded from the headlines, because they do not make for interesting news. While you might find yourself pulling an all-nighter or two (which we do not necessarily encourage), the goal is not to make this a habit. Preventing burnout is an intentional process that requires developing healthy habits (see Chapter 12: Wellness, Section III).

Now what happens if you tried your best but still end up feeling burned out? At this point you must take a break from activities that might be contributing to your stress. Take some free time, do the things you love, be with the people you love and if you can, seek help. You can seek help by confiding in a friend, mentor, or anyone willing to provide support. You can also utilize various resources such as online sources, mental health phone lines, or your school's counselling services,

if available. Being burned out does not mean you are a failure, or you did something wrong. Instead, it represents a chance for you to regain energy, unlearn unhealthy habits and behaviours, and adopt new, healthy habits that will contribute to you being an amazing physician in future.

Imposter Syndrome

Have you ever doubted your abilities, felt undeserving of your accomplishments, or felt like a fraud? That is imposter syndrome. Simply put, imposter syndrome is a psychological pattern which makes you doubt yourself and your accomplishments. Imposter syndrome is common among pre-medical students, medical students, and physicians. In the journey to becoming a physician, you might begin to doubt your ability and even question whether you have what it takes. With success comes joy, and all imposter syndrome does is steal that joy. We hope that even while reading this, you reflect on your own lived experiences and appreciate the wonderful things you have done. Regardless of what your achievements are, do not doubt that you are an amazing person, and you deserve the accomplishments that come with that.

To overcome imposter syndrome, you can start by positively affirming to yourself that you belong. We are often our own biggest critics, so be intentional about the words you use to speak to yourself. This takes practice and do not expect to see results overnight. But the more intentional you are about reminding yourself that you are deserving, the more likely you are to believe those words to be true. Secondly, look for evidence that convinces you that you are not a fraud. Sit down, reflect, and think of all your past accomplishments. Your past accomplishments remind you of all the work you have put in over the years and that your success was not an overnight feat. In addition to focusing on past accomplishments, focus solely on yourself. Commonly we compare ourselves to others and their accomplishments. However, comparison only plants seeds of doubt and exacerbates imposter syndrome, only serving to increase the apparent masking of your own accomplishments. Focusing on yourself, your accomplishments and working to be the best version of yourself is all that matters. From experience, we can tell you that medical schools are not necessarily always looking for the students with the highest of GPAs, MCAT scores, and other

quantitative metrics (See Chapter 6: Applying). But medical schools are looking for students with the potential to be great physicians, so focus on being the best version of yourself. Lastly, surround yourself with people who believe in you and will cheer you on as you journey to becoming a physician. When you feel doubt creeping in, speak to people who can remind you that you belong. The journey to medicine can seem long, daunting, and challenging sometimes, but seeking support from others can go a long way.

If no one tells you this, we are here to echo that you are very deserving of every single one of your accomplishments. Good luck with your journey!

IV. Time Management & Habit Building

For many of us, applying to medical school felt like a part-time job. We often underestimate the amount of time it takes to research schools and admissions requirements; write essays and organize resumes; practice for interviews; and complete the MCAT and CASPer. This is on top of what feels like an innumerable leadership positions, volunteer groups, and extracurricular activities. Have we even factored in studying and employment? Personal relationships? It can get overwhelming very quickly.

In academia (especially in medicine), there is constant talk about wellness and mental health. However, there seems to be a paucity of what that looks like for applicants and students alike. The purpose of this section is to put together the key aspects of wellness (relationships, nutrition, exercise, etc.) into a cohesive unit. You can drink smoothies until your face turns green or exercise for hours - but if you do not have a fool-proof schedule and time-management skills, the application process will be soul crushing. As mentioned previously, everything ultimately comes down to your ability to balance your career aspirations, extracurricular activities, personal relationships, and study time in a sustainable way.

This section draws substantially from the following (highly recommended) texts and resources:

- Digital Minimalism by Cal Newport (2019)
- Atomic Habits by James Clear (2018)
- Deep Work by Cal Newport (2016)
- The following Youtubers: Ali Abdaal, Thomas Frank, and Matt D'Avella.

Part 1: What matters to you most? Schedule it.

In a world crammed full of distractions and competing goals, a schedule is tantamount to your success. For many students this process can feel 'stifling'. Nobody wants to schedule 'video games' in a planner. Nonetheless, we will argue that this is precisely the kind of activity that will make the application process more manageable and fulfilling. If you give yourself a playbook for your week - you are better equipped to handle what comes your way. In reality, this produces more freedom, insofar as you give yourself the time to complete the kind of activities that constitutes wellness in its fullest sense; the stuff that gives you the most joy.

Before you create a schedule, it is imperative for you to decide on what matters most. Are you an athlete or fitness enthusiast that needs a detailed exercise routine to stay sane? Are you working a demanding job that requires a lot of your time? Perhaps your close relationships with family and friends is most important to you.

- Begin by scheduling in those things you cannot ignore.
 - This is the foundation of all 'time-management' tips, and it is because it is a major key to your success and wellbeing. You need to have a sense of what is taking up your time before you can manage it! You'd be surprised.
 - Practice Exercise: Sit down and set a 15-minute timer, and block out all the activities you need to do each week, i.e. work, school, clubs, etc.
- Once you have a sense of the things you need to do each week, start considering what spaces there are in your schedule for the other important, non-academic activities - reading, watching Netflix, working out, cooking, etc. These are equally important to your health. Just because you can move them around doesn't mean they should not be prioritized in their own way!

Part 2: Find a scheduling system that works for you.

Once you've figured out what your priorities are and what other hobbies you want to include in your schedule, try out different scheduling systems to see what works for you! Here are some suggestions:

- Create a Google calendar with recurring events for those things - such as fitness classes, chores, schoolwork, etc. Modify it each week to add one-time events.
- Buy a physical agenda! These have been pushed to the wayside by the popularity of electronic methods (such as the aforementioned Google Calendar). But for some of you, you need a written planner to be accountable to yourself.
- You can try out different methods for organizing your planner based on your preferences, and you might find great ideas with free online tutorials. .

The most important part with finding the correct system is to find one that is sustainable, reliable, and open to change. Use something you know you can continue using week after week, without fail. Of course, you could spend hours creating the most beautiful and colour-coded journal or planner - but if you can't maintain it, what is the point?

Part 3: Stop lying to yourself. You know you've been on Twitter for five hours today.

The fact of the matter is that most of us waste our time on useless activities every day. There is no way to sugar-coat it. The purpose of this section is not to shame you or tell you to 'delete all your social media' as a form of wellness. This is simply not realistic - and we strongly encourage you to stop setting unrealistic expectations for yourself. Here are some ideas instead: 2

- Reflect deeply about what you're spending your time on. Maybe you binge-watch Grey's Anatomy on Netflix for three hours every day and pretend that is not draining your time to do other things (no judgement). Explore what that vice is, and how you are going to meaningfully tackle it - read on to find advice.

2 Newport, Cal. *Digital Minimalism: Choosing a Focused Life in a Noisy World*. New York: Portfolio/Penguin, 2019.

- Remove the guilt you feel about taking time away from schoolwork to have time for yourself. We should not advocate for the kind of poisonous productivity that leaves no space for self-care and time to let our brain rest. But we all know the difference between healthy free time and procrastinating for hours by mindless scrolling through Instagram.
- Recognize that there is always space for improvement - but what does that improvement look like? Does it mean completely deleting and/or removing your social media/video games/Netflix/[insert vice]? Or limiting your usage? What does success look like for you? You are the only person that matters in this discussion.

Part 4: Build a strong system that emphasizes consistency over perfection.

In his book *Atomic Habits*, James Clear states that “goals are good for setting a direction, but systems are for making progress.” So many of us set lofty goals - about our GPAs, MCAT scores, interview preparation, specialty choices, etc. However, if you do not put in place the kind of foolproof system that centres on daily habits working towards this goal - it becomes much tougher. Do you have that kind of system? ³

When you are building the daily habits that constitute your strong system, prioritize consistency over perfection. Let's say you want to get a high MCAT score. Is it better to have 10 perfect study days out of 30 in a month? Or to consistently study everyday for 30 days - even if you have some bad days thrown in? The latter is what allows you to build habits - the kind of mindless repetition of an activity you need to accomplish your long-term goal.

In more ways than one, habit-building requires introspection and a lot of work! There are some video resources at the bottom of this chapter to help specifically with the kind of detail (cues, rewards, habit stacking, etc.) for those interested specifically in habit-building.

³ Clear, James. *Atomic Habits: An Easy & Proven Way to Build Good Habits & Break Bad Ones; Tiny Changes, Remarkable Results*. New York: Avery, an imprint of Penguin Random House, 2018.

Key Takeaways

Here are some important things to consider when thinking about managing your time:

- I. Identify a specific goal to focus on during your work hours. Do not write down in a to-do list ‘study for the Chem/Phys section of MCAT’. Instead, write: “read pages 2-20 of the Kaplan Physics book and complete 10 practice questions.”
 - I. Some other recommendations: use timers to delineate your time (e.g. Pomodoro timers) and schedule breaks from your long periods of productivity.
- II. Create a foolproof system.
 - I. Learn about the following concepts: habit-building, spaced repetition, active recall, and goal setting. These go a long way!
- III. Measure your success. Keep a scorecard! ⁴
 - I. This can look different for everyone. Some people track their goals on a calendar; some use a habit tracking app (Coach.me, Streaks, Habitshare, etc.); some track hours of study. Find what works for you.
 - II. You cannot know how close you are to a goal if you are not tracking your progress.
- IV. Confront your scorecard with courage. Be honest with yourself about your failures and successes in the recent past. Where can you improve?
 - I. If you have a way of measuring progress, you can notice where you have faltered.
- V. Prioritize regularity and consistency over perfection.
- VI. Minimize distractions by upholding the beauty of boredom. When you want to be idle, be idle with intention! It is much better for your mental health to play Animal Crossing after getting work done (or at least knowing you have scheduled a time to complete the work) than to stressfully try to enjoy free time with the impending doom of a deadline.

To summarize, James Clear puts it best: “We don’t rise to the level of our goals, we fall to the level of our systems.”

⁴ Newport, Cal. *Deep Work: Rules for Focused Success in a Distracted World*. New York: Grand Central Publishing, 2016.

Healthy Lifestyle

Chasing the goal of going to medical school can be a time-consuming process and taking care of our physical health can fall on the back burner. When the topic of wellness is thrown around, the first thing that comes to mind is mental well-being but taking care of our physical health with nutrition and physical activity is just as important.

Nutrition

Our brain needs fuel, and how we fuel our brain makes a difference in both its function and our mood! This connection can be explained through the gut-brain axis. Research has shown that the foods that we eat affect our gut environment, and our gut health can negatively or positively affect our mood through the serotonin receptors located in the gut. Eating healthier foods for a healthier gut can improve our mood⁴. This portion of the chapter is not meant to explain what foods to eat, but how to implement healthy changes to your lifestyle.

Allocate A Specific Time for Meal Prepping

Eating healthy can be stressful. Imagine coming home after a long day of school, studying, or work and having to spend more time cooking a nutritious meal when feeling drained. This can lead to choosing convenience foods, which are not always the most nutritious. This is where meal prepping becomes a game changer.

Benefits of meal prepping:

1. Healthy foods become accessible;
2. Saves time throughout the week;
3. Reduces stress of decision making; and
4. Saves money.

Organization prior to prepping the meals is very important, and this can be done through a spreadsheet. Here are some tips when creating your spreadsheet:

- Save your list of recipes! Record the time spent on a recipe, complexity of the meal, any modifications made, and your overall impression.
- Plan everything out – breakfast, lunch, dinner, AND snacks
- Create a grocery list to reduce time at the grocery store and prevent buying things you do not need.
- You can use excel or google sheets to allow you to track meals over time and give access to other people (if sharing!)

Below is a sample spreadsheet for meal prepping, both for tracking meals and for the week! There is not a single way of going about this, but any organization can make your meal prepping process easier.

Recipes

Table 1. Sample spreadsheet for meal and recipe tracking.

Meal	Time Spent	Essential Ingredients	Impressions/Rating	Link
Tofu Scramble	25 minutes	Tofu Any vegetables	Very versatile, could eat it for any meal	www...

Meal Schedule

Table 2. Sample spreadsheet for organizing meals and snacks throughout the week.

	Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
Breakfast							
Lunch							

Dinner							
Snacks							

What Should I Be Eating?

When scrolling through our social media feeds, they are often consumed by fad diets and products that are targeted for weight loss to make us “healthier”. But eating well does not necessarily mean going on fad diets or only eating only these “good” foods. It is about creating changes to your diet that you can maintain in the long term. This can be as easy as making the same foods that you enjoy but substituting certain ingredients to make it more nutritious or healthy. It is important to remember that these foods do not have to be banned from our diet, but rather we are choosing the healthier option more often. By not limiting ourselves, we can foster a healthy relationship with food while also improving our well-being.

Table 3. Sample substitutes: examples of some substitutes that can make your meals healthier.

If the recipe needs:	Substitute for:
All purpose flour	Whole wheat flour or oat flour
Ground beef	Lean ground beef, ground chicken, or ground turkey breast
Sugar (for baking)	Applesauce or honey
White rice	Brown rice or cauliflower rice
White pasta	Whole wheat pasta or zucchini noodles
Mashed potatoes	Turnip or cauliflower mash
Sour cream	Greek Yogurt

For more information on how and the types of foods we should be eating, Canada's Food Guide has plenty of recommendations!

Resources

Minimalist Baker - This website includes endless recipes for alternative diets including dairy-free, gluten-free, vegan, and vegetarian. All recipes are 10 ingredients or less, 1 bowl, or takes less than 30 minutes to prepare!

Allrecipes or SuperCook - Both apps are free and come up with recipes for you once you enter whatever you have left in your pantry! This is perfect for last minute healthy meals.

Budget Byte\$ - Eating healthy can become costly without knowing what foods to buy. This app creates easy healthy meals that are also budget-friendly!

Physical Activity

1. Why is physical activity important?

Studies have shown a link between aerobic exercise and our mental well-being! Outlines below are just a few of the many benefits of including physical activity in our daily lives¹:

- I. Improved mood: Exercise reduces anxiety, depression, and negative mood by improving self-esteem and cognitive function¹.
- II. Improved Sleep: Exercise improved sleep quality while reducing daytime sleepiness².
- III. Stress Relief: Exercise reduces stress hormones and stimulates endorphins, inducing feelings of relaxation and optimism³.

IV. Increased Mental Alertness

Overcoming Barriers

Life is busy. We can always say that we have no time, energy, or motivation left at the end of the day to get physical activity. But, identifying the barriers we may face in our journey to getting physical activity and creating strategies to overcome them will help incorporate exercise into our daily life!

Time - Start by tracking how you spend your time throughout one week to help identify where you can fit in exercise 3-5 times a week. If you still feel that your time is limited, start incorporating exercise into activities you were already doing. Walk or bike to school instead of taking transportation or driving. Exercise while watching TV. Every little bit counts! For more help with time management, head to the [Time Management](#) section of this chapter.

Energy - If you are too tired at the end of the day, plan your exercises at the start of your day. Exercise can build energy levels!

Motivation or Confidence - It can be overwhelming exercising around others, but these feelings are normal. Start with a set exercise plan to give you a sense of direction or find a workout partner to increase your sense of comfort, enjoyment, and to encourage each other. You can keep each other accountable and motivate one another to keep striving towards your goals. Remember not to compare yourself to others, everyone is on their own fitness journey!

Do I Need to go to the Gym to be Physically Active?

When choosing to incorporate physical activity into your life, you should leave the mindset that you have to be “athletic” to exercise behind. Being physically active does not always mean going to the gym and lifting weights, but instead looks different to everyone.

The most effective way to implement physical activity is to do something that you enjoy. Forcing yourself to exercise in a manner you do not like is counterproductive. If you hate going to the gym, do not go! There are many ways to be active that fit into your life. Do not be afraid to try something new!

Some fun ways to get exercise without going to the gym:

- Play your favorite playlist and dance;
- Join your school's intramural team;
- Take a hike;
- Cycling classes;
- Barre classes;
- Go on a bike ride, walk, run; and
- Kickboxing.

Sources:

1. <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC1470658/>

2. <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4341978/>

3. <https://www.health.harvard.edu/staying-healthy/exercising-to-relax>

4. <https://www.health.harvard.edu/blog/gut-feelings-how-food-affects-your-mood-2018120715548>

Mindfulness and Meditation

Meditation and mindfulness have been shown to be very effective ways to maintain wellbeing, manage one's emotions, handle stress, and serve as powerful cognitive behavioural coping strategies for transforming the way one responds to life events. ⁵ Thus, it can be very helpful to take part in mindfulness and meditation when applying to and during medical school, which can be a strenuous process. Students are required to juggle their personal lives with obtaining a high undergraduate GPA, writing the MCAT, formulating a strong application, and taking part in extracurricular activities. Using mindfulness and meditation to cope with these stressors can help you achieve your goals and enhance your performance by improving attention and sensory processing through cortical thickening,⁶ emotional regulation and response by increasing hippocampal and frontal volumes of gray matter,⁷ and learning and memory by increasing regional brain gray matter density.⁸

Meditation is a set of attentional practices which lead to an altered state or trait of consciousness. This is done by expanding awareness, having a greater presence, and a more integrated sense of self. This way, one is able to achieve inner calmness and awareness.⁹

⁵ Astin J. A. (1997). Stress reduction through mindfulness meditation. Effects on psychological symptomatology, sense of control, and spiritual experiences. *Psychotherapy and psychosomatics*, *66*(2), 97–106. <https://doi-org.proxy.bib.uottawa.ca/10.1159/000289116>

⁶ Lazar, S. W., Kerr, C. E., Wasserman, R. H., Gray, J. R., Greve, D. N., Treadway, M. T., McGarvey, M., Quinn, B. T., Dusek, J. A., Benson, H., Rauch, S. L., Moore, C. I., & Fischl, B. (2005). Meditation experience is associated with increased cortical thickness. *Neuroreport*, *16*(17), 1893–1897. <https://doi.org/10.1097/01.wnr.0000186598.66243.19>

⁷ Luders, E., Clark, K., Narr, K. L., & Toga, A. W. (2011). Enhanced brain connectivity in long-term meditation practitioners. *NeuroImage*, *57*(4), 1308–1316. <https://doi.org/10.1016/j.neuroimage.2011.05.075>

⁸ Hölzel BK, Carmody J, Vangel M, et al. Mindfulness practice leads to increases in regional brain gray matter density. *Psychiatry Res*. 2011;191(1):36-43. doi:10.1016/j.psychres.2010.08.006

⁹ Paholpak, S., Piyavhatkul, N., Rangseekajee, P., Krisanaprakornkit, T., Arunpongpaisal, S., Pajanasoontorn, N., Virasiri, S., Singkornard, J., Rongbudsri, S., Udomsri, C., Chonprai, C., & Unprai, P. (2012). Breathing meditation by medical students at Khon Kaen University: effect on

Meditation has been shown to allow individuals to successfully face challenging circumstances in their lives. Generally, there are two types of meditation, concentrative and mindfulness meditation. Concentrative meditation focuses on attention onto an object and sustaining that attention until the mind is still.¹⁰ Mindfulness meditation focuses on an open awareness to any contents in one's mind that arise⁵. Some examples of both types of meditation that can be completed in 5 to 10 minutes are:

- Focused breathing exercises (concentrative and mindfulness): taking deep breaths pausing slightly after inspiration and expiration while developing a conscious awareness of your surroundings, emotions, thoughts, ideas, feelings, etc.⁵.
- Body scan (concentrative and mindfulness): while lying on your back with arms and legs extended, focus your attention slowly on each part of your body from toe to head and become aware of any sensations, emotions, or thoughts.¹¹
- Sitting meditation (mindfulness meditation): while sitting with your back straight with your feet flat on the floor and hands in your lap, try to clear your mind and focus on your breathing. If any physical sensations or thoughts interrupt your meditation, appreciate the experience and return your focus to your breathing⁷.
- Focus on an object (concentrative meditation): sit with your back straight, feet flat on the floor, and hand in your lap, choose an object that your body can focus on such as the flame of a candle or a sacred symbol. Attempt to maintain your focus and if your mind drifts away, recognize it and return your mind to a focusing on the object.¹²

psychiatric symptoms, memory, intelligence and academic achievement. *Journal of the Medical Association of Thailand = Chotmaihet thangkaet*, 95(3), 461–469.

¹⁰ Dusek JA, Benson H. Mind-body medicine: a model of the comparative clinical impact of the acute stress and relaxation responses. *Minn Med* 2009; 92: 47-50.

¹¹ Mayo Clinic. (2018, August 17). Can mindfulness exercises help me? Retrieved from <https://www.mayoclinic.org/healthy-lifestyle/consumer-health/in-depth/mindfulness-exercises/art-20046356>

¹² Graf, S. (2020, March 24). How to Do Concentration Meditation. Retrieved from <https://www.wikihow.com/Do-Concentration-Meditation#:~:text=The objective of concentration meditation,calm, focused, and grounded.>

Tip: Try to include these meditation practices in the morning, right after you wake up or before bedtime daily. You can also meditate during your study sessions for school, for the MCAT, or even when you are feeling stressed writing your medical school application essays. Try to set aside at least 10 minutes during your breaks to meditate.

The benefits of meditation have been widely proven. A study conducted in 2016 recruited 1st, 2nd, and 3rd year medical students in New York and subjected them six weeks of yoga and meditation. They found that the medical students had lower levels of stress, higher feelings of peace, focus, endurance, happiness, and personal satisfaction after the meditation.¹³ Another study recruited students from a college residence and divided them into two groups, one which performed yoga for 45 minutes daily and one which did not. They found that the college students who performed yoga had significantly higher scores of cognitive appraisal, positive affect, self-compassion, and more mindful attention. This group also had a lower level of negative affect and expressive suppression.¹⁴ Therefore, meditating may be a useful way to cope with the challenges of applying to medical school and perform better in school and/or any assessments you may be preparing for.

Alongside meditation, mindfulness is extremely effective in maintaining wellness during one's journey applying to medical school. Mindfulness is a form of meditation that deserves its own spotlight. Mindfulness is a conscious sense of awareness, characterized by systematically paying attention on purpose.¹⁵ This attention should aim to embody compassion, impartiality, and

13 Prasad, L., Varrey, A., & Sisti, G. (2016). Medical Students' Stress Levels and Sense of Well Being after Six Weeks of Yoga and Meditation. *Evidence-based complementary and alternative medicine : eCAM*, 2016, 9251849. <https://doi-org.proxy.bib.uottawa.ca/10.1155/2016/9251849>

14 Patel, N. K., Nivethitha, L., & Moventhan, A. (2018). Effect of a Yoga Based Meditation Technique on Emotional Regulation, Self-compassion and Mindfulness in College Students. *Explore (New York, N.Y.)*, 14(6), 443–447. <https://doi-org.proxy.bib.uottawa.ca/10.1016/j.explore.2018.06.008>

15 Kabat-Zinn, J. (1996). Mindfulness meditation: What it is, what it isn't, and its role in health care and medicine. In Haruki, Ishii, Y., and Suzuki, M. (Eds.), *Comparative and Psychological Study on Meditation*, Eburon, Netherlands, pp. 161±170

acceptance of self and one's surroundings.¹⁶ This way you are aware of your feelings and senses without interpretation and judgment. It is well-known that mindfulness as a formal discipline helps to foster greater awareness and insight amongst students and practitioners. One study investigated the effects of mindfulness-based stress reduction on medical and premedical students. Students were subjected to an 8-week mindfulness meditation intervention and it was found that level of anxiety and distress including depression had decreased, and empathy had increased¹². Therefore, mindfulness practices are beneficial with regards to dealing with anxiety and developing the needed skills to be an empathetic physician. Some examples of mindfulness exercises are:

- Pay attention and live in the moment: take your time to experience your environment with all of your senses and an open-mind. For example, when you are walking outside, look at the trees, smell the freshness, feel the bark on the tree, taste the crisp air you breathe in, listen to the leaves rustling in the wind⁷.
- Body scan and sitting meditation: discussed above.
- Mindful wakeup: wakeup and set intentions and your motivations for that day, ask yourself "what are my intentions for today". By doing so, you will make it more likely to feel motivated and be mindful and compassionate in everything you do.¹⁷
- Activate your mind and muscles: try to exercise and take part in physical activity to master a skill, improve your conditions rather than just to burn calories. Try to focus on your movements and breathing, which will help you feel strong and capable. Set a goal, try to challenge yourself, and make sure your intentions are positive¹⁸.

16 Shapiro, S. L., Schwartz, G. E., & Bonner, G. (1998). Effects of mindfulness-based stress reduction on medical and premedical students. *Journal of behavioral medicine*, 21(6), 581–599. <https://doi-org.proxy.bib.uottawa.ca/10.1023/a:1018700829825>

17 Kornfield, J., Marturano, J., Hester, A., Domet, S., & Hurlock, H. (2018, December 13). 5 Simple Mindfulness Practices for Daily Life. Retrieved from <https://www.mindful.org/take-a-mindful-moment-5-simple-practices-for-daily-life/>

18 Kornfield, J., Marturano, J., Hester, A., Domet, S., & Hurlock, H. (2018, December 13). 5 Simple Mindfulness Practices for Daily Life. Retrieved from <https://www.mindful.org/take-a-mindful-moment-5-simple-practices-for-daily-life/>

Tip: Try to perform these exercises daily, whenever you are able to. Try to incorporate mindfulness into everything you do. Mindfulness is a lifestyle, not a chore or a task. When you find yourself feeling disconnected, stressed, “zoned-out”, or emotionally unstable try to recognize and appreciate how you are feeling. Then try to reconnect with yourself, awareness and environment by performing the aforementioned exercises.

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Social Media and Positive Self Worth

Pre-med Forums

Many of us have been there, visiting the Premed101 forums, looking at past years' posts by applicants who were admitted into medical school and comparing our statistics to theirs. Although it may give some informal information regarding the Canadian medical school application process, they also have the potential to cause more distress than reassurance. The reality is, we know they are there and we are very likely going to check them – they do serve as an extra resource after all and isn't that what the medical school process has made us believe? That to be admitted to medical school, we must exhaust every resource available to shape us to be the best applicant possible? Here are 3 reasons why you might want to rethink how much you allow the forums to define your self-worth and preparedness for the application process:

Your life experiences and stores cannot be captured in 8 sentences.

If we were to summarize your life experiences for you in the next 8 sentences, you would likely take offense to it. How is it possible to condense many years' worth of hard work, beginnings and endings that were planned and unplanned for alike, your personality and the little quirks that are uniquely you and so much more? It is not possible. However, that is what you find on forum posts. Result. Geography. GPA. MCAT. Degree. ECs (extracurriculars). Essays/CARS/Supplementals. Interview. A singular MCAT does not capture the multiple attempts that many people make and the lessons you learned along the way to adapt, adjust, and try again. Interviews? CARS? Supplemental essays and statements? Our personal assessments of ourselves are likely not

reflective of how other people perceive us. Self-assessment is a known phenomenon, and it is very likely that we overestimate or underestimate our performance. You are a lot more than 8 sentences.

False information. False anonymous information. Everywhere. (The Trolls).

Just while writing this, we went to take a peek at the forums and found an anonymous poster claim that they were responsible for admissions at an Ontario school and are currently a resident. They said, “The only ones who were accepted with low GPAs (lower than 3.9) are graduate applicants.” I regret to inform you, anonymous poster, that the author of this post was admitted with a GPA that was very below 3.9 without ever even considering graduate school. This false information may have stopped someone from applying and convinced them to give up before even trying. Do not let that person be you.

Think about all the extra time you could have.

To take care of yourself instead of stress yourself out more than this process already is. You deserve to feel excitement, pride, hopeful during this process just as much if not more than the nerves that accompany it. You cannot engage in self-care if you do not prioritize it and make time for it.

Social Media Influencers

Social media has become a medium through which many aspiring healthcare professionals, healthcare students and even practicing professionals share their signifiers of social, mental, and physical wellness. In medicine, the concept of professionalism and self-regulation as a practice of professionalism is commonly discussed both prior to medical school, during medical school, and throughout the career of a physician. There is an expectation that whether a student or practicing physician, one’s social media presence and statements made online should be made with the awareness that whatever is posted on internet-based media and interfaces are made public. As

such, a social media presence reflects on the larger organizations that the individuals are a part of in addition to on themselves and medicine as a whole. Even when accounts are technically made private, posts should be made with the understanding that there is no such thing as a private social media network. These ideals have been supported by governing bodies such as the College of Physicians and Surgeons of Ontario and the Canadian Federation of Medical Students.

That being said, it is of opinion that healthcare influencer accounts are even more so curated than regular influencer accounts to uphold expectations of professionalism. What does that mean for its viewers and followers? It is very rare to see a balanced picture of the good, bad, and ugly of the pre-medical school, medical school, and the physician journey that may be advertised online. It might all look good – feeds curated with celebrations of successes, accomplishments, perfection. However, it is important to understand that if looking at those accounts instills feelings of inferiority to you and the inability for you to imagine yourself as a medical student or practicing physician one day, then these accounts are no longer serving you with valuable information about the medical world and are instead harming you and a break from social media might be worthwhile at that point.

Key Takeaways

Before we let you go, we would to say “Thank You” for reading! We would like to wish you the best of luck with your applications. You are the future of healthcare in Canada and we are looking forward to meeting each one of you. Here are some of the important points that were touched on throughout this chapter:

- i. Focusing on maintaining and developing relationships may not feel efficient or productive, but it is essential to long-term health and performance.
- ii. This process can be difficult for the people who are important to us. It is important to recognize this and spend time with people outside of the medical school bubble to ensure their relationship needs are being met.
- iii. Identify your burnout warning signs and address them as they appear.

- iv. Imposter syndrome is common amongst premedical and medical students. Try to surround yourself with people who believe in you and will cheer you on as you journey to becoming a physician.
- v. Identify a specific goal to focus on during your work hours. Do not write down in a to-do list 'study for the Chem/Phys section of MCAT'. Instead, write: "read pages 2-20 of the Kaplan Physics book and complete 10 practice questions."
 - a. Some other recommendations: use timers to delineate your time (e.g. Pomodoro timers) and schedule breaks from your long periods of productivity.
- vi. Create a foolproof system.
 - a. Learn about the following concepts: habit-building, spaced repetition, active recall, and goal setting. These go a long way!
- vii. Measure your success. Keep a scorecard!
 - a. This can look different for everyone. Some people track their goals on a calendar; some use a habit tracking app (Coach.me, Streaks, Habitshare, etc.); some track hours of study. Find what works for you.
 - b. You cannot know how close you are to a goal if you are not tracking your progress.
- viii. Confront your scorecard with courage. Be honest with yourself about your failures and successes in the recent past. Where can you improve?
 - a. If you have a way of measuring progress, you can notice where you have faltered.
- ix. Prioritize regularity and consistency over perfection.
- x. Minimize distractions by upholding the beauty of boredom. When you want to be idle, be idle with intention! It is much better for your mental health to play Animal Crossing after getting work done (or at least knowing you have scheduled a time to complete the work) than to stressfully try to enjoy free time with the impending doom of a deadline.
- xi. Prioritize e your physical well-being! Physical activity and the way you fuel yourself can boost your mood, sleep, mental alertness, and reduce stress.
- xii. Allocate time each week toward meal planning to make eating healthier a simpler and faster process.

- xiii. Introduce healthier substitutes into your existing diet or swap out for healthier ingredients to create a lifestyle that you can maintain.
- xiv. Mindfulness and meditation can help improve attention, emotional regulation, learning, and memory when practiced consistently.
- xv. Try to spend 10 minutes each day practicing mindfulness or meditation. The days you have the least time are often the days you need to meditate most.
- xvi. While Pre-med forums can be interesting and helpful, they often filled with misinformation and they can become toxic environments.
- xvii. Social media influencer accounts are often highly curated to present a specific image that is can be very unrealistic.

To summarize, James Clear puts it best: “We don’t rise to the level of our goals, we fall to the level of our systems.”

IX. General Resources

Matt D’Avella: [3 Ways to Make Your Habits Stick](#)

James Clear: [Tiny Changes with Big Results](#)

Ali Abdaal: [How to Study for Exams](#) (Active Recall & Spaced Repetition)

Mindful: <https://www.mindful.org/meditation/mindfulness-getting-started/>

Headspace: <https://www.headspace.com/mindfulness>

“With mindfulness, life’s in the moment: <https://news.harvard.edu/gazette/story/2018/04/less-stress-clearer-thoughts-with-mindfulness-meditation/>

X. Letters to my Younger Self

You didn't get in, now what?

This chapter will be discussing the steps some of us have taken after receiving a rejection from medical school applications. Some key points in this chapter includes: the immediate reassessment period - should you try again immediately, take a break, or pursue an alternative route, reflecting on your application +/- your interview, review some potential weakness and areas of improvement, and how to make the most out of the time you have before potentially applying again.

Chapter 11: You didn't get in, now what?

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This chapter covers the steps to follow for anyone who applied to medical school but was unsuccessful. We will guide you through recovering from that initial shock of rejection, the process of seeking feedback on your unsuccessful application, developing a plan to strengthen yourself as an applicant, and outline potential avenues you can take in the interim between application cycles.

Introduction

Opening that rejection email may feel like the end of the world. But it is not the end of the world, nor is it the end of your career!

Often the decision comes down to timing – it simply wasn't your time this year.

Remember you are not alone – less than 20% of applicants to Canadian medical schools are accepted and less than 10% are accepted to Ontario medical schools (1). In fact, many medical students admit to having applied 2 to 3 times before being successful.

Medical schools see far more qualified applicants each year than they have spots to fill.

Do not panic! Instead, finish reading that rejection email, make sure you weren't waitlisted (which by no means is a rejection) and once you are certain you will not be starting medical school in the fall, put your phone down and take a deep breath. Take a deep breath and go for a walk or do whatever you need to do to clear your head of that burning desire to go to medical school – at least temporarily that is. Rejection is emotionally and mentally exhausting, especially after dedicating so much of your time, energy, and money into applying. Thus it is crucial to your well-being to take a break from all things medical school-related. Take a day or two off from all things academic, spend time with family and friends, doing whatever it is you

like to do for fun (see Chapter 12 for a more in-depth discussion on the importance of wellness during your pre-medical school journey). If you don't have classes and can afford to take more time off to recuperate, consider taking a 1-2-week vacation to decompress. It is important you do not let this setback affect your academic performance if you are still in school at the time of receiving this disappointing news. Remember how hard you have worked over the years to maintain a strong GPA. Do not drop the ball now because a downward trend in your grades can negatively impact your future applications. Channel your disappointment into determination of getting accepted the next time you apply. Focus on your courses and finish your academic year on a strong note., This will ultimately strengthen your application for next time. In the following chapter we will highlight the steps you can take if you were unsuccessful in an application cycle to improve your candidacy for subsequent cycles. We will guide you through the immediate steps of evaluating your previous applications for weaknesses and planning on how you can improve on those shortcomings through various academic and non-academic endeavours.

Re-evaluate Your Application

One of the most critical things you must have is a PLAN. Specifically, it is important you have a rough timeline in mind of when you would like to reapply. Do you want to apply in the immediately next application cycle or are you willing to take a year or two off before reapplying? This timeline will help guide the pace at which you seek feedback and make the necessary changes to improve your application.

Taking the time to thoroughly evaluate your unsuccessful application is the first step to ensuring success in your next attempt. You are your biggest critic, so be the first to critically appraise your performance in the preceding application cycle. It will have likely been months since you last saw your application so you will have a chance to look at it with a fresh set of eyes. Begin by creating a list of what your strengths and weaknesses are as an applicant tailored to each individual school. Pay attention to your GPA, MCAT score, extracurriculars, your written statements, and letters of recommendation. Go back and review each school's requirements, admissions statistics, mantra, and culture in order to better understand what they are looking for in prospective medical students/applicants.

A strong indicator of your performance in the previous application cycle, relative to the global pool of applicants at these schools, is whether you were rejected pre-interview or post-interview. Read through following two scenarios below to see which category of unsuccessful applicant you fall into:

Did you receive one or multiple interviews but were either waitlisted or rejected? If yes, you are likely a competitive applicant on paper and need to work on your interviewing skills (see improving interview). Furthermore, consider your success rate for obtaining interview offers. How many of the schools that you applied to offered you an interview? If you applied to dozens of schools and only received 1 or 2 interviews, you may need to evaluate your pre-interview competitiveness as determined by your GPA, MCAT score, CASPer score, extra-curricular activities and written application. You should seek out external feedback for your written application. Being rejected post-interview can tug at your heartstrings but you should not be dejected as this is also the best-case scenario as this means you likely do not have to make extensive changes. With some improvements to your written application it is possible to receive more interview offers next time* (be weary that the application reviewers change from year to year and the variance of cohort applying may influence standards from year to year). Supplementing your improved written application with extensive interview preparation can make you feel more confident that you will receive an offer of admission.

Were you waitlisted for an interview, but never received one? If yes, this likely means you have a competitive application but have some shortcomings that must be addressed. You should get external feedback on your application.

[*Random fact: McGill Faculty of Medicine has a pre-interview waitlist](#)

Did you not receive any interview offers? If yes, this means there are several minor or one or two major deficiencies in your application that need to be addressed. Your next step would be seeking external feedback for your application.

It is vital to get outsider opinions once you have completed self-evaluating your application. The first stop for external feedback on your application should be the schools you applied to. Remember that different schools have different admissions requirements and as such they have different criteria for how they score applications. You can try to directly call or email the admissions department of the schools you applied to and ask for feedback. However, schools have differing policies on post-application feedback. It is important to become familiar with whatever system is in place at each school. The only Canadian medical schools that provide specific feedback and scores (both pre and post-interview) to rejected applicants are University of British Columbia, Calgary, Alberta, McGill and Dalhousie. Usually, the pre-interview score is based on MCAT score, CASPer score, GPA, research, extracurricular activities, and personal essays. As such, your pre-interview score can be very informative telling you where you fall statistically compared to other applicants in your cycle, indicating which components of your application need improvement. If you had an interview and were unsuccessful, a post-interview score indicates how your interview skills compared to other applicants and should determine how much effort you put into interview preparation for future cycles. Most schools, however, do not provide a pre-interview score or any specific feedback with your rejection email. It is still worth personally reaching out to the registrars or representatives of admissions committees of the schools you were hopeful for to see what exactly they are looking for in a strong candidate. While some may not be able to give individualized feedback, a representative can provide insight into the admission process and even help you come up with a plan for reapplying. It may seem annoying and unfair that you do not know what was “wrong” with your application but this new knowledge can help you highlight your strengths and transform weaknesses into strengths. Moreover, some schools also provide sample high quality essays that you can use to compare your responses to and determine if you are a strong applicant who merely needs to work on developing your written responses.

Sometimes it may feel like there is no clear reason why you were rejected. If this is the case, try to consult mentors, classmates, friends, successful applicants, and analyze your applications on your own to find weaknesses and areas for improvement. Be open to criticism and try not to internalize it. Try to understand that the feedback may sting but it is there to help you improve. These

individuals can provide excellent feedback as they likely know you and your accomplishments well and can tell whether your application reflected your best-self. Also consider emailing medical student groups at the university to see if they have any mentorship opportunities (see resources for mentorship for more suggestions for who to seek feedback from). An unsuccessful application cycle can sometimes also be attributed to the number of programs you applied to - the more broadly you apply the more likely you are to receive an interview. Keep in mind the greater time and money required when applying to more schools (refer to Chapter X for finances)

At the end of your re-evaluation and feedback seeking process, compile everything you learnt about your previous application and determine the sources of weakness. Use the following checklist:

Were my metrics (GPA, MCAT) strong? Compare your GPA and MCAT scores to the minimum cut-offs and previous years admissions statistics. Falling below the cut-offs or not having a competitive GPA and MCAT scores are the most common reasons why applicants are rejected pre-interview. If you identify either as being the contributing factor to your rejection, then there are solutions. For ways to improve your GPA, you can refer to the sections below on completing a fifth year or pursuing graduate studies. For improving your MCAT score see section on Re-taking the MCAT.

Did my application demonstrate the attributes the schools were looking for (also consider the CanMEDS roles): Each school has a specific set of mandates and values and your application should reflect that. For example, is the school's primary focus on rural medicine? If so, how would you fit in? Is the school more concerned about scholarship and academia? Have I demonstrated how I am best adapted to their program? Have I demonstrated what I can bring to the table as a future physician? A lack in any of these areas would indicate you may need to spend more time on adding experiences to your application. Sometimes, it's not even about drastically updating your application; rather, it may be something as simple as rewording statements. Reflect on your activities, referees/reference letters, and other sections of the application to determine how they

can best demonstrate the qualities/attributes, skills and experiences admissions committees are looking for. Refer to Chapter 6 for specific guidelines on submitting an exceptional application.

Did I forget to submit a part of my application or get a reference letter from someone that is not allowed to write one? It is not uncommon for applicants to forget to submit an important document by the school's listed deadline. Having a transcript arrive after a deadline could potentially cause a school to consider your application incomplete, thereby rejecting it. Moreover, consider who wrote your reference letters. It is also not uncommon for strong applicants to be rejected because their reference letter was written by someone who could have a conflict of interest. Examples include friends and family members, particularly with the same last name as your own. Be cognizant of this in your next application cycle.

There are many different options on what to do following rejection from medical school. Firstly, you should decide if you want to apply again and when. Take time to reflect on whether medicine is even the right career for you. Would you be satisfied with other healthcare professions? (see Chapter 1) Although students sometimes feel obliged to follow a medical career path because it is what their family expects of them, you will ultimately live your own life and have to endure all of the challenges associated with a career in medicine. You do not owe anyone when choosing a career path. Ultimately, the decision to reapply and continue on the path to becoming a physician is based on your personal life goals, what makes you happiest, and the extent of improvements you think your application requires to be competitive. When you choose to apply can also be based on where you are in your education and career. If you applied out third year and were unsuccessful, your next steps are pretty straightforward – finish your undergraduate degree. Use the time between third and fourth year to begin self-reflection and work on any weaknesses you identify in your initial application (see re-evaluate your application). If you are in your final year of undergraduate studies and were rejected, you have many more options in terms of what your next steps are. It is important to be realistic with yourself in terms of what you can accomplish between subsequent application cycles. If your application has some moderate weaknesses, such as in your interview

skills, MCAT score, research or life experiences, it is reasonable to accomplish these tasks in several months before the next application deadline.

Most students will retake the MCAT, take extra courses, engage in research, travel or take the time to invest in themselves in another way. However, if during your review of your previous application you identify large gaps, such as low GPA, extensive deficiencies in extracurricular activities, it is likely that you may need to invest more time into making improvements. Not everyone will reapply the following cycle and some people may even take 3 or 4 years off to invest in other passions and life goals. The options are endless as to what you do during this time to improve your application . Whatever you choose to do, have a plan and timeline in mind. Having a plan can help to make sure you are staying on track with whatever goals you have set between application cycles. The next few pages highlight both short-term and long-term avenues medical students pursued following rejection letters.

Returning to School

Graduate Studies

Graduate studies have recently become a popular option for students who have completed an undergraduate degree and want to continue formal education between application cycles. Pursuing graduate school is a multipurpose alternative plan for undergraduate students unable to gain acceptance into medical school after previous attempts who have decided on embarking on a medical career late into their undergraduate degree. This route allows you to strengthen your medical school application for future cycles in many ways, while simultaneously providing you with alternative careers and employment opportunities if you choose not to apply to medical school again or are unsuccessful after reapplying. Moreover, many medical students will complete masters and/or PhD studies during their residencies to pursue academic jobs or for career advancement. Thus, pursuing graduate studies before medical school can allow you to develop these skills much earlier in your training. Although there is no wrong option for graduate studies,

it would be useful for you to sit down and consider what your long-term goals are if you get accepted after an additional degree. For instance, if you are passionate about working in an academic hospital as a doctor, it could be useful to work towards a master's degree in epidemiology or clinical research. Alternatively, if you are interested in administration, you could pursue an MBA/MPH/MHA as there is an increasing trend of physicians working towards these degrees during their training.

There are several streams of graduate studies, which vary in duration, expectation, and the type of work produced at the end. Generally, graduate programs fall into two streams, research-based and course-based, also called thesis-based and non-thesis, respectively. Depending on the medical school, a course-based and researcher-based ,master's can be evaluated differently. Some schools do not categorize those with a course-based Masters in the graduate student pool of applicants, therefore the advantage is provided to those with a thesis-based graduate degree. As such, in some cases a research based Masters may be more more favourable to your medical school application - the decision ultimately comes down to which schools you want to apply to and your individual preferences and interests. It is best to choose something you are passionate about and which you could talk about in an interview. Interviewers often love to ask why you chose a particular path, such as completing a PhD, prior to applying to medical school. Some graduate programs can help add to your overall GPA with certain schools, while others with a lesser emphasis on coursework may not have a major impact on your GPA. One benefit of engaging in higher-level academia, in addition to enhancing your knowledge, is the plethora of networking opportunities and and ability to establish connections with individuals who may be helpful throughout your medical school journey. These can be referees for future applications or mentors who can provide insight into making difficult decisions. Earning a master's or a PhD can also open alternative career doors in the medical field. It is important that the decision to pursue a graduate degree is driven by interest and not just a desire to "boost your application". A lack of genuine passion for academia can be readily evident if brought up during the interview process and is often frowned upon.

Table 1. Pros and Cons of Pursing Graduate Studies to Strengthen Your Medical School Application

Pros	Cons
<ul style="list-style-type: none"> • Professional connections • Professional development • Allows you to continue education • Gain experience in project design and management, academic writing and potentially teaching • Enhance resume • A chance to invest in healthcare in a different way • Can open doors to alternative career paths 	<ul style="list-style-type: none"> • Time consuming • Expensive - consider programs with stipends • Long term commitment - it is frowned upon to leave graduate school early on acceptance to medical school

Applying to other post-graduate programs

If you are not interested in applying for graduate studies, there are a wide range of programs you can apply to. Some of these postgraduate programs are variable in length and can often lead to specific careers. For example, Pharmaceutical Regulatory Affairs and Quality Operation is a 1-year post-grad program that focuses on the understanding of the regulatory compliances in Canada. It often includes a paid internship that can help propel your career in that

field. Careers working in the private pharmaceutical industry or even with Health Canada are common employment sites. Another program is clinical research certification that helps with the conduct and principles of clinical research and design, something that can help further your interest in medicine.

You can also consider applying to other health professional programs such as nursing, pharmacy, physiotherapy, physician assistant, dentistry, etc. These programs have many similarities to medicine and can lead to fulfilling careers and can potentially suit your goals and aspirations You could also always re-apply to medicine after additional training and provide a diversity of knowledge to the incoming medical school class. Keep in mind some of these other programs have specific requirements and may need you to plan ahead to ensure you have the necessary pre-requisite courses, and/or additional exams (e.g. Dental Aptitude Test).¹⁹

Table 2: Pros and Cons to post-graduate programs or other professional schools

PROS	CONS
<ul style="list-style-type: none"> • Wide range of program choices • Allows you to continue education without doing graduate studies • Develop knowledge/skills geared towards a specific 	<ul style="list-style-type: none"> • Academic rigour varies and can affect your GPA • May be difficult to do other projects (e.g. volunteering, research, etc.) • Long term commitment - it is frowned upon to leave other professional schools early on acceptance to medical school Course requirements to apply to these programs may

¹⁹ Admission Requirements of Canadian Faculties Of Medicine Admission In 2020, The Association of Faculties of Medicine of Canada, https://afmc.ca/sites/default/files/pdf/2020_admission-requirements_EN.pdf

<p>career that will lead to employment</p> <ul style="list-style-type: none">• Can often complement training in medicine	<p>require you to plan ahead to ensure you can start at the end of your undergrad.</p> <ul style="list-style-type: none">• Many of these programs are costly
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Continuing Undergraduate Studies

If you were planning to graduate, you may consider adding a 5th year as a special student. Alternatively, you can complete another undergraduate program. This may allow you the flexibility to redo certain courses to potentially improve your GPA and provide you with time to consider adding additional courses to apply more broadly. Although continuing undergraduate studies is not a popular choice in general, it is one that is available to you if you feel you are not ready to graduate. This 5th year can also provide you with time to reflect on your current and future goals.

Table3. Pros and Cons for continuing undergraduate studies

Pros	Cons
<ul style="list-style-type: none"> • Chance to improve GPA • Redo specific courses • Help study for the MCAT • Chance to take courses for interest and possibly parallel plan for other programs • Developing other non academic skills and activities • Get involved in school activities • Complete prerequisites courses missing previously (e.g. English course to apply to UBC) • Some schools may only look at last 2 or 3 years of undergrad marks 	<ul style="list-style-type: none"> • Possible that GPA is not improved (it is a risk) • A 5th year can be costly and it is not as great for future jobs/employment <p>GPA calculation is variably dependent on institutional policy</p>

Taking Time Off

While some students feel like taking a year off to travel or volunteer is needed after going through many years of school, others may still feel pressured to be highly productive during this time making this seem like a mere pseudo-escape. In any case, taking a year off to travel or volunteer is a great way to embark on some deep self-reflection, personal growth and relax. That said, your decisions on whether to travel, work or volunteer, and on where to do so should be well-planned. If there is an intention to reapply to medical school, it may be a good idea to set internal deadlines for decisions that you will need to make.

“When are the deadlines for applications the year I finish my time off?”

“When are interviews and will I be able to make them”

“How long am I giving myself to decide on whether I want to re-apply for medical school or continue on my new path?”

“Will I have to work to balance the cost of traveling with medical school application fees?”

Thinking about these questions ahead of time will reduce last-minute stress. A reasonable timeline is to try to plan out gap year travel or volunteer by March of your senior year, that way you can also weigh your options of travelling/volunteering with research and applying to graduate programs, which typically have deadlines around this period of time.

Taking a Year off to Travel

Don't feel pressured to be caught in the “rat race” of being extremely productive 100% of the time to get into medical school. Sometimes a break is necessary, particularly before starting the arduous path of becoming a licensed physician once accepted into medical school. Self-care is important. To this end, many medical students themselves travel throughout the year to recharge their batteries before going back into their studies, research, shadowing, and extracurriculars. Travelling as a pre-medical student allows you to develop stories and life experiences packed with lessons about other cultures, yourself, and not repeating certain mistakes in the future. The AAMC has a blog post about travelling during one's year off. Although travelling can be fun, it is strongly advised that you think about how much time you want to be travelling and weigh it against other activities like volunteering, working to make money, or performing research.

Table 4: Pros and cons of taking a year to travel

Pros	Cons
<ul style="list-style-type: none"> • Cater to your mental health • Provides the opportunity to do some reflection that might help your application • Experience new cultures, personal development, etc. 	<ul style="list-style-type: none"> • May be giving up time that could be spent on other areas of personal growth • May be a lost opportunity to reduce some financial burden before medical school

Taking a Year off to Volunteer Outside Canada

Service is a great way to facilitate personal growth. Many students decide to volunteer during their year off. It is very important to decide on how much time you will want to spend volunteering versus balancing your gap year with other activities. Volunteering abroad may lead to an opportunity to be a part of something you have always had at the back of your mind during undergraduate studies, or even lead something new altogether. It could also allow you to gain a new insight into various issues in other communities and ways in which you can work with others, particularly in solidarity with community members, to help those in need. This newfound knowledge can be critical to you if you are passionate about global health or global surgery and would like to make this a part of your medical training and/or practice. Some pros and cons for volunteering are listed below.

Although volunteering can be a good way to boost your application, a common misconception is that it is a necessary requisite for medical school, but this is not the case. It is not fair to those you are serving if you are not passionate about volunteering for them or if you are merely using them as a stepping-stone so it is important to recognize this.

*Note that travelling to a location where you can volunteer with the actual intent of vacationing or adding to one’s resume is known as voluntourism. This type of volunteering for personal gain is not the best reflection of service, and there are many documented cases of communities that have

been inadvertently harmed by individuals coming into their living spaces, that disrupt their way of life without fully giving them the tools to recover and grow. It is important to plan your volunteering experiences with this in mind so that you not only grow yourself but also leave a lasting, positive, and sustainable impact on these communities.²⁰

Employment

Working is another great way to keep you busy all while exploring different careers. Working can be related to medicine such as research which may allow you to further develop those skills all while remaining in the academic world. At the same time, working in a non-medical field can provide you with not only new stories and skills but also help you stand out and build strong rapport with your interviewers. That being said, regardless of what the job is, working gives you the option to explore without committing to an additional degree such as doing a master's or PhD. A list of pros and cons have been listed.

²⁰ Example of harms done by voluntourism in Honduras:

https://www.researchgate.net/profile/Sharon_Mclennan3/publication/262732217_Medical_voluntourism_in_Honduras'Helping'the_poor/links/5541899c0cf2b790436be304/Medical-voluntourism-in-HondurasHelpingthe-poor.pdf

Table 5: Pros and Cons to employment

PROS	CONS
<ul style="list-style-type: none"> • Earn a living • Save money to reapply or repay loans from undergraduate studies, and thus reduce financial burden before medical school • Explore different career options • Take a break from academia and avoid burnout • Depending on workload, may give you time to work on applications • Allows you the time explore options if you do wish to return to academia (parallel plan reapplying to medicine AND other programs) • Build new skills and overall work experience • Develop contacts and mentors • No studying during off work hours (hopefully!) • mMay be able to take classes to improve GPA without committing to another degree • Make yourself stand out and build strong rapport with your interviewers 	<ul style="list-style-type: none"> • Hard to gage how schools interpret this • May be difficult to readjust to academic life when you do return • Workload may be heavy and difficult to schedule time for other activities (e.g. volunteering or research) • Does not add to your academic repertoire • Not always easy to find a job

Working in Research

Working in research allows one to develop a lot of great skills similar to that of a graduate program. If you are on the fence about doing a master's, taking time to work in the field is a great option before you make the commitment. Often, many jobs in research recruit during the summer months, particularly hospital-based research positions. A benefit of working in research is that it allows you to get a better understanding of the conduct of research from ethics board approval to recruiting patients to writing manuscripts. It can be fulfilling to be able to see projects run their course. If you work at a hospital, there is access to mentorship, attending grand rounds, professional development and networking with other like-minded people. The skills and development gained in a research position is high and very translatable to medicine.

Working in a non-med related industry

Any current medical student that has worked in a non-med industry will tell you that the skills and experiences that they have gained are indispensable. The value of a non-medical job depends on what you make out of your position. Working in a non-med industry won't necessarily harm your application as there are many medical students who have worked in the whole range of construction, security, flying planes, and retail before beginning their medical journey. In each of these positions there are traits that you gain that can be looked at favorably by whoever is reviewing your application. For some people, their job is in fact a part of their personal story. It is important to embrace this and reflect on if your decision to work in a non-med industry plays into your development as a doctor. At the same time, working in a non-medical industry can be rather unique to interviewers who typically only see students specializing in research and volunteering. If presented correctly during your interview, the interviewer can be more likely to connect with you, remember you, and vouch for you during the acceptance selection process.

Anecdote for working in a field outside of medicine:

Mohamed Ahmed

“

After completing my undergraduate degree, I decided to work in a warehouse as a production operator. During my time there, I realized the hard work that many labourers commit to - long shifts, cycling from day/night schedules, and all the effort that is put into their work. Effective communication was crucial to maintain high-throughput. My team comprised a majority of recent immigrants from all corners of the world. With that, I was able to learn countless lessons in cross-cultural communication, which became valuable during my application essays, interviews, and throughout medical school. Eventually I became a quality auditor, a higher leadership role that required diligence to detail and relaying key quality and safety information to various teams. Discussing the value of quality and safety for both the customer and business with production workers, managers, and others allowed me to learn how to better tailor my language and approach so that everyone could appreciate and benefit from my suggestions. Ultimately, this experience, which was not directly related to medicine, gave me a number of key experiences that really built upon my character and provided for meaningful anecdotes during my medical school applications!

”

²¹

Anecdote for working in a med-related industry

Working in a med-related field is invaluable because you can earn money and gain clinical experience at the same time. I worked as a surgical assistant at an ophthalmology clinic for two years before reapplying to medical school. Before applying to this job, I looked into the position to

²¹ An article with some interesting perspectives on working during your gap year can be found at <https://www.prospectedoctor.com/weekly-weigh-in-taking-a-gap-year/>

ensure that it aligned with my interests and objectives. It was really important for me to develop leadership skills and gain clinical exposure. I felt that this position would help me do that.

I enjoyed my work because I could see how doctors managed their patients. In my application, I reflected on what I had observed in the interactions between medical professionals and their patients. I considered both the limitations and strengths that I had been privy to in those interactions and in the doctor-patient relationship. While working there, I also often considered how I could improve that relationship both in my current role and even as a future physician.

On the other hand, I was also able to gain insight into how patients really felt. Dissatisfied patients did not always express themselves honestly to the doctor. Patients confided their fears in me, and that helped me better navigate my own role as a liaison between the patient and the doctor. It helped me figure out what I could do to help patients feel better, and how I could best support them in their relationship with the doctor.

It was also critical for me to consider my employer's priorities and goals. While patient care was a priority, I also realized that some of the interests of the private clinic, included the delivery of services and products. Although these goals certainly influenced my experience, I also recognised that the stakeholders involved included patients and doctors, meaning that there was always more risk involved with mistakes or errors. I thus shouldered immense responsibility as a surgical assistant I tried to be aware of my own anxiety and feelings around these responsibilities. When I needed help, I could rely on my coworkers and supervisor for support. All in all, working at an ophthalmology clinic was an invaluable experience. Because it was an important part of my life, it also ended up being a critical part of my application the second time around.

Reapplying

Use your rejection and the period between now and subsequent cycles as an opportunity to grow, improve, and learn. It would be futile and unproductive to submit the same application in the hopes of getting accepted in subsequent application cycles. While it may not seem like it at first, this is an opportunity to try new things, take on challenges, and learn more about yourself.

Consider applying more broadly (if you are financially able to do so) If you only applied to your home province, consider applying to other schools in Canada. While the decision to apply to more broadly is a personal one, it may improve your chances to consider all 17 Canadian medical schools. Each has their own requirements and often have more stringent requirements for out of province students. Applying more broadly does mean more costs to apply so be mindful that you truly meet the school's requirements and consider the number of students they take outside of their home province. It would be beneficial to call the admissions office of the out-of-province schools to see what they consider a strong candidate. For instance, some schools will only consider your MCAT and GPA and provide interviews to students who ranked in the 99th MCAT percentile. If you did not score very strongly on your MCAT, and this is important for the school to which you are applying, it would not be in your best interest to blindly apply. However, if you are comparable to the pool of strong applicants at a school, then you should strongly consider applying. If you speak French, also consider applying to the French medical schools (which do not require the MCAT).

Re-taking the MCAT

There are a few things to consider when deciding whether to retake the MCAT. What are your objectives in retaking the MCAT? Do you have other commitments that might impair your ability to prepare adequately for a retake? While these are questions that you must consider critically, here are some other guidelines to help you with your decision:

Understand how each school of interest considers your MCAT score. What is considered a “low” MCAT score will vary from school to school. Some schools may only require that you meet the cut-off, with no concern for how the score ranks in comparison to other applicants or exam takers. Ask yourself then: Will a higher score really add significant value to my application? If it seems unlikely that a higher score will greatly improve your application, it may be plausible to instead focus your efforts on strengthening other sections of the application. For some schools, your MCAT metrics may only be considered for a specific section of the test. McMaster, for example, is only interested in your CARS score. In this case, if you decide to rewrite, you may want to focus your preparation and practice on verbal reasoning, reading and comprehension. While you may have your eyes set on a dream school, explore other schools to determine if your current MCAT score is competitive elsewhere, in which case, retaking the MCAT might not be necessary.

Should you decide to retake the MCAT, it is imperative that you come up with a plan that addresses what may have gone wrong last time and what you will do differently this time. Reflect on why you may have not scored as competitively as you would have liked. Was it lack of preparation? Poor study habits? Lack of resources? Perhaps, there were factors that you couldn’t necessarily control. External pressures, for example, may have made it difficult to adequately prepare for the MCAT— commitments like jobs, volunteering, and even family. While you may want to change your study habits and approach to the MCAT in order to have a better chance at scoring higher, you may find that you have to balance work, volunteering, and studying all at the same time. Since preparation is key to your success on this assessment, reflect on your priorities. Schedule some time each day to study for the MCAT and, if feasible, consider taking a break from some of your commitments. Refer to Chapter 5 for more specific guidelines on performing well on the MCAT.

Consider the limitations of retaking the MCAT. Some schools will only consider the most recent score, regardless of whether it’s higher or lower than your previous one(s). MCAT scores are also released on particular dates, meaning that you might not see your score until after you’ve submitted your application. What happens then if your score is not competitive, but you’ve already applied? Also consider how costly a retake might be. Not only are some prep courses expensive,

but taking time off work to focus on studying may also not be financially feasible in your situation. Think critically about these things when deciding whether to retake the MCAT.

Extracurriculars

Reflect on how you can better demonstrate and develop the attributes, skills and experiences that a competent physician should possess. . . Sometimes, rewriting and rewording your statements to better emphasise CanMEDS roles can greatly improve your application. Rather than stating or listing your tasks, for example, focus on how the activity helped you grow as a person and will ultimately contribute to your identity as a physician. Continue the activities, therefore, that are meaningful to you and your growth, since demonstrating long-term commitment is also an important aspect of your application. You may consider the way in which you are describing your extracurriculars in essays. For instance, rather than trying to list out the many accomplishments you may have achieved, it may be better for you to thoughtfully self-reflect on how the activity helped you grow as a person and ultimately as a future physician. For example, if you had the opportunity to work in an underprivileged community, you should not dedicate your essay on the accomplishment of spending three weeks to help build a well. Instead, you can focus on how the experience shaped you as a person. You want the admissions committee to see that you are self-reflecting. Thus, you could focus on your newfound appreciation for working long hours and working with your hands through building the well. Moreover, the experience allowed you to see the importance of teamwork and pre-planning to achieve a common goal. It also allowed you to become a part of this community coming together to build this well. Ultimately, you can integrate this to demonstrate that as a physician it will be critical to work well with others, plan well in advance, and sacrifice hundreds of hours all for the benefit of others.

There is no formula for an exceptional extracurricular profile. It is therefore useful to reflect on your own weaknesses, strengths and fears. In the past, you may have not focused on the activities and pursuits you were most passionate about for fear that they may have not been relevant to medical school. Any opportunity, however, to learn more about yourself, take on new challenges,

grow and/or develop skills is relevant. When you genuinely enjoy doing something, it's much easier to discuss it during interviews, in personal statements and essays!

Letters of Recommendation/Reference Letters

Were your letters of recommendation strong attest to who you are as a person? If you have any doubt that your referees are well-suited to speak highly of your character, consider replacing or changing them. To ask for a reference letter, consider: "Do you think you would be able to write a strong letter of reference for medical school?" Moreover, consider changing your referee(s) if you are now involved in an extracurricular activity that means a lot to you. Perhaps, you've developed a new and strong, professional relationship with a supervisor, manager or preceptor. Referees who work directly with you will be able to provide several instances that attest to your skills and character. Sometimes, it's also helpful to select referees whose professional recommendation will have profound weight on your application. Individuals like preceptors, professors and doctors may be appropriate for this reason alone. On the other hand, you may not find it necessary to change your referees. That's also completely fine, but it may be worth it to request that your referees update the previously submitted reference letters to reflect your new activities, new skills and new experiences. Refer to Chapter 6 for more specific guidelines on letters of recommendation.

Take your time! Don't rush improving your application. It takes time to grow and learn more about yourself. You may need to skip an application cycle, so that you have enough time to work on your application. Rest assured - this is completely fine!

Improving the Interview

Reapplying after previously interviewing can be a daunting experience, but do not let that get to you! Having been previously selected for an interview, you have made it through the most challenging portion of the selection process. The medical schools in question already value your written application, and you may not have to adjust by much to remain competitive.

The next step of interviewing is a different ballgame. You need to be able to demonstrate your soft skills, personality, values and critical analysis skills in a rather short amount of time. Oftentimes the stress and anxiety of the interview can lead to poor performance where you could not represent yourself clearly, provide relevant experiences, articulate your thoughts clearly, and build rapport.

After having experienced the interviews in the past, the first step is to reflect on and re-evaluate your previous interview experiences. How did you feel before, during, and after the interviews? Did you feel you could improve on any of your answers? Were you able to answer your questions in time? Did you feel mental blocks? Really taking the time to reflect on questions like these and more, will help you isolate any areas of strength and weakness that you can work upon for your next application process! Also, it is good to compare your experiences with MD interviews to other interviews you have experienced in the past - good and bad - to get to know the interview style that works for you, and further tailor it to make you a more confident interviewer.

Next, the interview process is a very personable experience, and really explores your ability to communicate your thoughts, actions and values with your interviewers. With that said, having made it this far you have plenty of experiences that make you an awesome and interesting person - never forget that! In order to portray that awesome person to maximum effect you need to: A) Be yourself, and be true to your values and beliefs. And in order to that you need to B) Get to know yourself.

To do so, reflecting on your past experiences is key. One common mistake applicants make is trying to give standardized answers to interview questions. As you practice with dozens of other applicants during the next application cycle you will begin to see that most students answer questions, like MMI and MPI stations, in a formulaic manner. Although this is important, and in some cases essential, it is equally vital to set yourself apart so that you develop rapport and your interviewer remembers you. Take, for example, the question of whether you would prescribe contraceptive medication to a 13-year old who is asking for it from you and pleading that you do not tell her parents. Although there may not be an age of consent in Ontario and you could spend time evaluating the pros and cons of providing the contraceptives, you should use this time to focus on how you can get the interviewer to get to know you during this station. You will learn about medical ethics and laws during medical school so show the interviewer who you are as a person. For instance, you can focus on the importance of family to you and how you would feel extremely

uncomfortable with yourself by not telling the parents in this situation and building a barrier within this family dynamic. You can provide an anecdote about the importance of keeping a family together. Alternatively, you can emphasize the importance of advocating for women’s reproductive rights and any previous experience you have had with this field in the past. You can spend some time showing the interviewer why this topic is important to you, how you advocate for others, and who you are as a person and would be as a physician. While you remain the typical framework of answering MMI and MPI questions, you can use this approach to give the interviewer a sense of who you are as a person including your values, morals, and how you make a decision.

As an aside, doctors must make many difficult decisions and are not always right in the choices they make. It is better to outline a decision you will make, such as who you would save in a hypothetical trauma MMI station, compared to just outlining the two sides of the coin and saying that you would need more information to decide, ultimately not giving a solid answer. Many students continue to fall into this trap. Be aware of it and try to integrate a bit of who you are in your response while still answering which choice you will make, when applicable.

The table below highlights one method of exploring your experiences that you may have listed in your OMSAS application:

Experience - E.g. OMSAS Entry #; Type of Experience
Narrative: - What is the story of the situation?
Skills Gained: How have I improved from this situation?
Shortcomings/Failure: What were some aspects that could have improved on to improve this experience in the future?
Conflicts: Were there any conflicts in this situation? How was it handled?

Undergoing a process like this is valuable in building your narrative and increasing your repertoire of experiences that can be used to improve the strength of your interviews. This has the effect of reducing mental block as well, and overall improving confidence when conducting your interviews!

Since the interview depends on effective communication - practice, practice, practice. Having previously interviewed, utilize your previous experiences to go over similar conditions with friends, family, or even by yourself. Other valuable resources in preparing for interviews include interview workshops hosted by University support groups, student councils, career support offices and privately by tutors (see Section 5. - Resources). Reviewing a list of common interview questions can be extremely helpful in not only practicing your ability to speak clearly, but it can also improve on your confidence by being more prepared. In practicing, it is really important to assess your ability to demonstrate that you listen, and be able to articulate a meaningful response.

This can be done with peers by having them provide feedback on certain aspects of your interview. Also, recording your practice interviews can be really valuable to allow you to self-critique your own interview. There are many times when you feel like you are doing a great job responding to questions only to listen back to, or watch, yourself sounding awkward, seeming uncomfortable, or having bad interview etiquette (touching your face too often, saying too many “umm” “uhh” “yeah”, rambling, not reading the room when the interviewer wants to move onto the next question). Remember that it is better to fail in practice and catch and correct your mistakes early than to be ignorant to them and continue making these errors during the real interview where every second counts.

Lastly, anxiety often is a big contributing factor to hindering interview performance. To start, it is okay to feel nervous, but it is important to address the cases of excessive anxiety that could prevent you from shining. Some important questions to ask yourself: Did you feel that anxiety affected your interview? What effect did it have on your ability to conduct/prepare for the interview? What are the root causes for your feelings of anxiety?

First and foremost, it is 100% critical to remember that you are an awesome individual with unique, interesting and valid experiences. Oftentimes a sense of inadequacy compared to peers can lead to self-doubt, and this leads many to try to portray themselves as a sort of “ideal applicant”. There is no one “ideal applicant” and interviewers can very quickly see through this facade as it does not reflect your personal

beliefs and values. It may not seem obvious at first, but once you practice with others you will learn when students are trying to sound like an “ideal applicant” and when they are genuinely expressing themselves. Remember that you were chosen for an interview because you were deemed highly qualified!

Steps to bust anxiety:

- Control what you can - From the steps above, exploring your experiences and practicing interviews helps you to be better prepared and more confident for future interviews.
- Practice anxiety relieving techniques that work for you - some options include, taking a pause, breathing exercises, and so on. This can be practiced when conducting mock interviews.
- Practice self-compassion.
- Avoid caffeine before interviews.
- Do the power pose

Resources for Support and Mentorship

Community of Support

The community of support (COS) is an initiative started at the University of Toronto. It helps support premedical students who are Indigenous, Black, Filipino, economically disadvantaged, or who self-identify with having a disability at every stage of their journey to medical school. They offer a wide range of support from MCAT preparation, workshops led by doctors and medical students, and access to mentorship. They can also provide 1-on-1 support through the entire process of applying by pairing you with a current medical student or resident who can provide their input and guide you along the way. Once you sign up to their subscription list, you have access to all their programs.²²

²² <https://applymd.utoronto.ca/community-support>

Mentors in Graduate School

Graduate school is an amazing way to make connections with like-minded individuals who are in a position you see yourself and propose a mentorship relationship. As the field of medicine advances it is becoming more multidisciplinary. Your mentor does not have to be a physician or someone who has gone through medical school, they just need to be someone who is willing to invest in your future. A mentor can be a great source of motivation, support and advice. You can have different mentors for different aspects of your life for example personal mentors that can speak to balancing your personal relationship and aspirations. A great mentor can speak to attaining professional goals and share experiences from when they were in a position similar to yours. When reaching out to potential mentors be clear about your expectations of the mentorship so you are both on the same page and get the most out of the relationship.

University Career Services

Universities want their students/alumni to have a long and successful career and often offer career counselling services to do so. This may include workshops to improve your resume and interview building skills, and act as point of contact to explore various career opportunities. Through these services you may be able to gather more information for medical schools as well as help in exploring other career opportunities. In terms of applying to medicine, these career services often provide useful resources in helping prepare for medicine including; practice medical school interview questions (e.g. practice question banks); tips and strategies to improve your applications; and can even set up mock interviews to help you practice and improve on your interview skills. Do not hesitate to reach out to these services, they are usually a quick email, or phone call away!

Dear Lucas,

As you progress through your education, savour every minute of it. While you may not see it now, your time in college and undergrad will be an amazing once-in-a-lifetime experience. Study hard, but also play hard. Spend time with your friends, family, partner, and son. You will never again have as much time as you do now. So, enjoy it!

'Play hard' doesn't necessarily mean 'party hard', but it does mean you need to enjoy yourself. Whether it's work, volunteering, classes, research, or other extracurriculars, do things because you enjoy them, not just because you think you need to. If you are passionate about what you do and show up ready to work every day, you will succeed.

Lastly, don't sell yourself short. You are capable of big things when you set your mind to it, but don't let your ego get in the way of the work you do. You will succeed not because you're special, but because you are dedicated and hard-working. Remember, no matter what position, title, or letters you have behind your name, you are still the same person. Remain humble and fierce. Now, go out and change the world!

Sincerely,
Lucas King

**

Dear Kika,

I know you think that once you get into medical school - life will become easier. This could not be further from the truth. In my few years on earth, it has quickly become apparent to me that the opposite is the case. Each stage of your life brings its own complexities. Medical school will add even more confusion to your life. You will stay up in bed wondering if this is the right path for you. You will question every decision you make. You will compare yourself to anyone with even a shred of skill that surpasses yours. This is not a bad thing; you are simply growing.

It may feel overwhelming now, as you struggle to balance competing priorities. I know it is hard. But if anything, live through the difficulties of the process and wrestle with them as they come. Work hard now to learn good habits. It will make medical school, residency and practice so much easier. Learn how to cook from Mom, and learn how to parallel park from Dad.

Take time away from studying to catch up with your friends! There will never be enough time to study for that test you're worrying about. But the moments you spend with those you love are irreplaceable. And finally, stop comparing yourself to others! If you're always looking over at someone else's garden, when will you water yours? Please remember that you have something to bring to the table, and the people with big titles and long resumes and what feels like an insane number of accomplishments are human too.

Never forget the evergreen quote: "Comparison is the thief of joy." Live joyfully.

Sincerely,

Kika Otiono

Dear Farhan,

I know what you're thinking—you're thinking, "What if I am not good enough to get in?". You're focusing on the negatives and are constantly worrying about what the future holds for you. Well, let me tell you a few things, believe in yourself, be confident in your abilities, and believe that you are enough. Positive thoughts bring positive outcomes.

You are the son of loving and caring parents who have instilled within you values of love, empathy, compassion, and perseverance. They support you in every capacity they can, and although they may not be able to support you financially and have a difficult time understanding your academic journey, they are there for you and are so proud of you. Use their love as a vehicle to motivate you to strive for greatness.

Do not doubt yourself just because you are the first generation in your family to attend high school and a post-secondary school, and potentially medical school. Instead, use this experience as a gift and inspiration to keep following your dreams. Your hard work, dedication, and passion for medicine have brought you to where you are right now so do not give up.

I am so proud of you for taking care of yourself through your journey of studying for the MCAT, maintaining a high GPA, and being active in research and the community. Keep working out, writing poetry, meditating, and spending time with your loved ones. However, I know at times you feel worn out and weak because you are working two jobs during the summer along with working as a research student and studying for the MCAT. You are finding it difficult to balance everything and come close to breaking. This is normal. But you need to be proud of yourself for how hard you work. Hard work definitely pays off and when you receive the offer of admission to a medical school you will look back at these moments and smile. These are the moments that made you the diligent and strong man you are today.

Make sure to be a good role model for your younger brother and keep playing video games with him—he loves it and will. You do not know how much these little things mean to him.

All the best,

Farhan Mahmood

**

Dear Noor,

In a few short (but what will seem like long) years, you are going to be sitting in your first lecture of medical school at your dream school. It is going to feel surreal for the foreseeable future, because you're going to wonder how you ever ended up here. You're going to laugh at how trivial failing a couple of exams in your first year of your undergraduate career suddenly seems, and you're going to be thankful you didn't give up your passions when the people in your life told you to stop focusing on your extracurriculars and stay focused on your grades because the moments you will remember most from your undergraduate experience were the lessons learned outside of classroom settings.

You're going to have a hard time navigating the pre-medical school mentality because you'll know deep down that it is toxic to determine your self-worth by comparison to your peers, but you're going to do it anyways, and you're going to think that once you get to medical school, your self-esteem and strong sense of identity are going to come together. But they won't. And you will spend your first year of medical school wishing that you prioritized your mental health more in the years prior and in understanding that medical school is not the destination, but just another journey that will come with a whole new set of challenges and many rewards too. It's going to be worth it and I hope you take some time to be proud of yourself for the big and the little wins alike, and when you feel like you're starting to lose yourself in the process, don't feel afraid to fall back on the people who care about you, because they will be there if you let them be.

Sincerely,

Noor

References

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