Pre-Health Organizational Meeting

Presented by

Keisuke Hasegawa and Jim Swartz

Co-chairs of the Health Professions Advisory Committee

and

Mary Jane Shroyer

Director of the Health Professions Career Community

Fall 2025



Outline of Meeting

- Discuss which programs fall under Health Professions
- Introduce the people on campus who are here to support you including Health Professions Advisory Committee (HPAC), Center for Careers, Life, and Service (CLS), and student groups
- Fall events
- General advice

Information specific to medical school:

- Discuss coursework for first two years/ choice of major
- Medical College Admissions Test (MCAT)
- An overview of the application process
- Recent application data
- Answer questions



Programs Related to Health Professions

- · MD
- DO
- Physician Assistant
- Veterinary
- Dentistry
- Optometry
- Nursing/midwifery

- Physical Therapy
- Occupational Therapy
- Pharmacy
- Public Health
- Etc.

There are many options!



Health Professions Advisory Committee (2025–2026)

Committee Co-Chairs

- Jim Swartz (Chemistry)
- Keisuke Hasegawa (Physics)

Center for Careers, Life, and Service (CLS)

 Mary Jane Shroyer – Director of the Health Professions Career Community

Committee Faculty Members

- Ben DeRidder (Biology)
- Shannon Hinsa (Biology)
- Ryan Miller (Statistics)
- Leslie Lyons (Chemistry)
- David Lopatto (Psychology)
- Colin Nolte (Statistics)
- Gina Schlesselman-Tarango (Library)

HPAC Administrative Support

Lauren Hosch-Lorenzen (Science Office)



Related Student Organizations

Minority Association of Pre-Health Students

- Supports all students pursuing health careers, especially those historically underrepresented in the medical field, through mentorship, informational events, speakers, and hands-on opportunities
- maps@studentorg.grinnell.edu

Translational Medical Club

- Provides health-related volunteer opportunities at local nursing homes and elementary schools
- medicalclub@studentorg.grinnell.edu



Careers, Life, & Service (CLS)

Your CLS Exploratory Team:

Dani Perkins – Senior Director

Robin Bourjaily – Assistant Director & Exploratory Adviser

Amanda Pearce – Assistant Director & Exploratory Adviser

Emily Creery – Exploratory Adviser

Your Career Community Director:

Mary Jane Shroyer – Health Professions Career Community

- Explore career paths within the healthcare industry
- Build your network and plan experiences to support future applications
- Reflect on how your planned experiences (athletics, off-campus study, etc.)
 support your career goals
- Get specialized support for applications and interviews to internships, jobs, and graduate/professional school



Sample of Fall Events

View & register for CLS events at career.grinnell.edu

Sept. 11: CLS Fall Welcome Event

Sept. 24: Designing Your Premed Journey Webinar

Sept. 29: Optometry Info Session

Sept. 30: Dr. Randall C. Morgan, Jr. '65 Seminar

Oct. 1: Summer Opportunities Info Session

Oct. 15: 4+1 MPH Info Session

Nov. 19: Healthcare Alumni Meetup

Dec. 01: Summer Research Workshop

You will be informed of upcoming HPAC events via the HPAC listserve.

Be sure to sign up today!



How HPAC Can Support You

- Assisting students in planning course work required for health professions
- Advise students in choosing health related careers and appropriate programs
- Writes the committee recommendation letter for applicants
- Occasional meetings on topics of interest to students interested in the health professions:
 - Careers in the health professions (medicine, public health, physical therapy, pharmacy, veterinary medicine, etc.)
 - Information about particular schools
 - Application process
- HPAC website:

www.grinnell.edu/about/committees/hpac



Basic Advice

- R-E-L-A-X; You don't have to complete all of the requirements in one term, or even one year.
- Take other courses besides science.
- Study.
- Find opportunities to learn about health professions (e.g., internships, shadowing).
- Find opportunities to demonstrate your social commitment and ability to serve people.
- Ask questions.

Classes You Need to Get Started On

 Most health professional schools require a year each of Biology and Organic Chemistry

At Grinnell this is <u>BIO 251& BIO 252</u>, <u>CHM 221& CHM 222</u>

- We recommend that you take both <u>CHM 129 or 210</u> and <u>BIO 150</u> this year!
 - These are the pre-requisites for Organic Chem (CHM 221-2) and Molecules, Cells, and Organisms (BIO 251)
- Also consider taking a math course during your first year



Required/Recommended Courses for Most Health Related Programs

Science

- 1 year of Biology (Biology 251 and 252. Note: BIO 150 is a prerequisite for 251)
- 2 years of Chemistry (Chemistry 129, 210, 221, 222)
- 1 year of Physics (Physics 131 and 132)
- Calculus (as required for physics at Grinnell College)
- Statistics (some med schools require or recommend stats)
- Biological Chemistry (BCM 262) (~50% of schools require biochem)

Critical Analysis and Reasoning Skills

- 1 year of English (required)
 - Tutorial counts for one semester
 - second semester should stress literature

Social And Biological Foundations of Behavior

• 1 semester Psychology and/or Sociology (recommended)

Check out specific requirements now at schools where you are likely to apply, including at least one school in your state of legal residence.



Application Data

- There are typically 70–100 Grinnell first-year students who express interest in health careers
- 30-55 Grinnell students apply to med schools each year
- A smaller number of students apply to other health professional schools (dentistry, veterinarian, PA, etc.)
- About half of you will change your plans that is OK!
- More than 2/3 of applicants will apply after they graduate

Choice of Major - U.S. and Grinnell

With careful planning, pre-health students can choose a major in a non-science discipline.

At Grinnell, the most common major is Biological Chemistry, but students major in a wide variety of disciplines. The key for you is to engage in a broad education and to complete some major. Medical and other health professional schools say that they do not care what the major is, so long as the required courses for admission to the professional school are completed.



Medical and Health Professional School Preparation

Complete courses

 Get relevant experience (and prepare to "make your case")

Prepare for and take the MCAT (or other) exam

 You can apply in the summer after your third year, (to matriculate right after graduation) but most students apply after graduation.

Workload Report Example

Applicant Workload Report

Application Year: 2013 Legal Name: Doe, John M. Report Date: 09/10/2012 AAMC ID: 11110111



AY 05-06	Sem Hrs	BCPM GPA	Cum GPA		Dates	Avg Weekly Hrs	Total WA Hrs
Coursework	30	3.3	3.3	Work/Activities			106
S1	16	3.3	3.3	Lab Assistant, Organic Chem	9/05 - 3/06	3	62
52	14	3.3	3.3	Independent Research*	12/D5 - 1/D6	4	16
				Hospital Volunteer	2/06 - 5/06	2	28

AY 06-07	Sem Hrs	ЭСРМ СРА	Cum GPA			Avg Weekly Hrs	Total WA Hrs
Coursework	2 5	4.0	3.4	Work/Activities			84
S1	15	4.D	3.3	Independent Research*	12/06 - 1/07	3	12
Q3	5	4.D	3.3	Student Government	2/07 - 5/07	4	48
Q4	5		4.0	Shadowing/Clinical Experience"	2/07 - 5/07	2	24

AY 07-08	Sem Hrs	ВСРМ СРА	Cum GPA			Avg Weekly Hrs	Total WA Hrs
Coursework	19	3.3	3.4	Work/Activities			308
B1	8	3.3	4.0	Independent Research*	12/D7 - 1/DB	3	12
5 2	В	3.3	4.0	Clerk at Glant	7/07 - 2/08	10	280
SU	3		4.0	Freshman Mentor	9/07 - 11/07	2	16

AY 08-09	Sem Hrs	BCPM GPA	Cum GPA			Avg Weekly Hrs	Total WA Hrs
Coursework	22	3.3	3.3	Work/Activities		*	36
S 1	12	3.3	3.3	Independent Research*	12/DB - 1/D9	3	12
52	10	3.3	3.3	Biology Student of the Month	2/DB - 3/08	4	16
				SAACS Conference	3/08 - 4/08	2	8
				Research Internship	4/08 - 5/08	6	24

Sem Hrs = Semester Hours | BCPM = Biology-Physics-Chemistry-Math | Cum = Cumulative | " = Most Meaningful Experience(s)

Avg Weekly Hrs = Calculated average based on Total V/A Hrs over weeks in sate range indicated | Total WA Hrs = Total World/Activity Hours in designated Academic Year

The MCAT (Medical College Admissions Test)

- Covers basic sciences (physical, biological and social), and critical analysis and reasoning skills.
- Should be taken ~ 12 18 months prior to your expected entry into medical school
- Most students take it late spring of their junior or senior year in college (note: if taking it in senior year, you will matriculate at least 1 year post-graduation.)
- Master the content (e.g., take courses), become familiar with the exam, practice, practice, practice
- The test scores are good for 2-3 years

GPA and MCAT Data

For all U.S. medical schools	<u>MD</u>	<u>DO</u>
• Mean GPA, 2022-23 applicants:	3.52	3.48
• Mean GPA, 2022-23 matriculants:	3.68	3.67
 Mean MCAT 2022-23 applicants: 	506.5	505.9
• Mean MCAT 2022-23 matriculants:	511.9	511.5

For Grinnell College students who are accepted into medical and osteopathic schools (10-year average, 2009-2019)

Mean GPA, accepted: 3.65



Application Data

About 62,443 applicants to U.S.

Medical and DO schools this year...

Matriculation rate is about 37%.

About 65% of Grinnell MD/DO applicants are admitted

(AAMC, 2021-22)



Grades and MCAT Scores are Important, but...

- Applicants with GPA> 3.8 and MCAT Score > 97th percentile, about 10% are not admitted to any MD program.
- Conversely applicants with GPA around 3.0 and MCAT score
 <45th percentile, about 15% are admitted.
- Conclusion, having better grades and MCAT scores is helpful, but other factors are taken into consideration by medical schools.



AAMC Premed Competencies

PROFESSIONAL

- Commitment to Learning and Growth
- Cultural Awareness
- Cultural Humility
- Empathy and Compassion
- Ethical Responsibility
- Interpersonal Skills
- Oral Communication
- Reliability and Dependability
- Resilience and Adaptability
- Service Orientation
- Teamwork and Collaboration

SCIENCE

- Human Behavior
- Living Systems

THINKING AND REASONING

- Critical Thinking
- Quantitative Reasoning
- Scientific Inquiry
- Written Communication





Grinnell College &

The University of Iowa College of Public Health

BA-Master of Public Health Cooperative Degree Program

- Complete both a baccalaureate and a master's degree in five years
- Open to any major at Grinnell
- Graduate admissions during spring semester of third year into the College of Public Health
- Visit websites for more on the requirements or attend info session on Oct.15 with Iowa's COPH

https://www.grinnell.edu/academics/centers-programs/ui-mph

https://www.public-health.uiowa.edu/grinnell-bachelor-of-arts-to-ui-mph-undergrad-to-grad/



Additional information

Health Professions Advisory Committee
 Members

CLS, in particular Mary Jane Shroyer

 https://www.grinnell.edu/about/leadership/ committees/health-professions



MAPS: Minority Association of Pre-Medical Students

Goals

- Support ALL students who are interested in pursuing health professional careers, but especially those in disadvantaged groups and underrepresented students in the medical field
- Events MAPS bring to campus: presentation on summer internships/research, organize attendance for medical education conferences and bring physicians to campus
- Provide hands-on opportunities and informational events; strengthen the premed community at Grinnell

Contact

maps@studentorg.grinnell.edu for help in your pre-health journey

MAPS Co-leaders:

- Filza Anis '26
- Tina Tran '26
- Meilin Hoshino '27
- Esther Lee '27
- Niel Pearson '27
- Farhan Rahman '27
- Yen Pham '28



What are Medical Schools Looking For?

Importance ratings of data used by admissions committees for making interview and acceptance decisions, scaled from 1=not important to 4=very important

Mean Importance Ratings	Academic Metrics	Experiences	Demographics	Other Data
Highest (≥3.0)	 GPA: cumulative bio, chem, physics,math (BCPM) MCAT: total score GPA: grade trend GPA: cumulative total GPA: post-bacc pre-med program cumulative total MCAT: total score trend Completion of pre-med course requirements 	 Community service: medical/clinical Community service: not medical/clinical Physician shadowing/clinical observation Leadership 	 US citizenship/permanent residency (Public) State residency (Public) Rural/urban underserved background 	Interview results
Medium (≥2.5 and <3.0)	 Completion of challenging upper-level science courses GPA: cumulative "all other" courses (not BCPM) 	 Paid employment: medical/clinical Research/lab Other extracurricular activities Military service 	 Race/ethnicity US citizenship/permanent residency (Private) Parental education/occupation/socioec onomic status 	
Lowest (<2.5)	 Degree from a grad or professional program Completion of challenging non-science courses Selectivity of undergrad institution Undergrad major 	 Teaching/tutoring/TA'ing Paid employment: not medical/clinical Intercollegiate athletics Honors/awards/recognition Conferences, presentations, posters, publications 		



What are Medical Schools Looking For?

Table 2. Percentage and Number of 2017 and 2018 Applicants Accepted Into at Least One Medical School, by MCAT Total Score and Undergraduate GPA Range

						MCAT Total					
GPA Total	472-485	486-489	490-493	494-497	498-501	502-505	506-509	510-513	514-517	518-528	All
3.80-4.00	3%	3%	8%	19%	31%	51%	64%	76%	83%	89%	66%
	3/107	7/217	40/482	204/1,061	668/2,141	1,782/3,500	3,207/5,009	4,156/5,492	3,971/4,772	4,213/4,743	18,251/27,524
3.60-3.79	0%	1%	5%	13%	25%	36%	51%	66%	75%	83%	48%
-	0/250	6/416	40/884	221/1,692	707/2,869	1,520/4.177	2,538/4,929	3,014/4,549	2,209/2,944	1,478/1,774	11,733/24,484
3.40-3.59	1%	1%	4%	10%	19%	28%	38%	52%	63%	71%	32%
	5/382	7/577	41/1,108	190/1,865	510/2,691	939/3,366	1,359/3,554	1,475/2,835	979/1,559	565/791	6,070/18,728
3.20-3.39	<1%	<1%	3%	8%	16%	22%	30%	40%	50%	58%	22%
	1/455	2/559	26/1,001	118/1,483	290/1,864	471/2,138	584/1,919	556/1,383	347/695	158/273	2,553/11,770
3.00-3.19	<1%	1%	2%	6%	13%	22%	26%	35%	42%	46%	16%
	1/499	5/515	13/710	62/959	136/1,070	223/1,034	237/908	228/650	103/245	57/123	1,065/6,713
2.80-2.99	1%	1%	2%	5%	7%	16%	21%	25%	28%	39%	9%
	3/459	2/367	9/439	23/481	37/504	75/462	76/361	48/190	31/110	14/36	318/3,409
2.60-2.79	0%	1%	<1%	4%	9%	18%	14%	15%	43%		7%
	0/306	2/212	1/278	10/254	22/257	31/175	17/124	11/69	18/42		117/1,726
2.40-2.59	0%	1%	2%	4%	3%	17%	26%	27%	30%	TT.	5%
	0/229	1/120	2/122	5/124	3/87	11/63	10/39	8 /30	3/10		45/830
2.20-2.39	0%	0%	0%	3%	12%	23%	10%	14%	-		5%
	0/126	0/67	0/55	1/37	4/34	6/26	2/21	2/14			19/387
2.00-2.19	0%	0%	5%	0%		9%		-			1%
	0/76	0/22	1/20	D/18		1/1.1					2/159
less than 2.00	0%		10%	-							1%
	0/38		1/10								1/67
All	<1%	1%	3%	10%	21%	34%	48%	62%	74%	84%	42%
	13/2,927	32/3,081	174/5,109	834/7,981	2,377/11,522	5,059/14,953	8,030/16,868	9,498/15,217	7,663/10,381	6,494/7,758	40,174/95,797



CLS Support



Your CLS Exploratory Team:

- Dani Perkins Senior Director
- Robin Bourjaily Assistant Director & Exploratory Adviser
- Amanda Pearce Assistant Director & Exploratory Adviser
- Emily Creery Exploratory Adviser

In Your First Year with Your Exploratory Adviser:

- Explore the breadth of healthcare and investigate multiple career paths
- Discuss how your Grinnell experiences support your career goals (off-campus study, athletics, performing or visual arts, languages, etc.)
- Plan the healthcare experiences you want to pursue prior to applying (community service, shadowing, building a network, summer internships and research)

CLS Support



Your Career Community Director:

Mary Jane Shroyer – Health Professions Career Community

In Your Second or Third Year, via the Health Professions Career Community:

- Explore requirements for your programs of interest
- Apply for internships and summer research in healthcare
- Connect with alumni in healthcare professions
- Attend workshops, speaker events, conferences, treks, etc.
- Get specialized advising on graduate and professional school
 - Selecting programs and schools
 - Application essay review & mock interviews
 - MCAT and other test prep resources