



Pre-Health Preparation

Developing a competitive application for health professional school

Anna Brochet
Health Professions Advising Office
Jensen Student Access to Science & Mathematics Center
California State University, Long Beach
www.csulb.edu/sas

Health Professions Advising Office



- Staff:



Anna Brochet



Maria Ramirez

- Services:

- Individual and Group Advising
- Workshops and Seminars
- Resource Library
- Letter of Recommendation Forwarding Service
- Application Assistance
- Personal Statement Assistance
- Mock Interviews

- Website: www.csulb.edu/sas

- Location: Hall of Science -164

Learning Objectives



After the presentation, you will:

1. Have a general understanding of what health professional schools look for in applicants
2. Be able to identify areas you need to further develop
3. Grasp the degree of difficulty in gaining admissions to health professional schools
4. Learn where to access vital pre-health information

Warm up!

- What major should you be?
- Are you at a disadvantage because your a community college student?
- Does it look bad on my application if I don't graduate in 4-years?
- What are some pre-requisites courses for health professional schools?
- Besides GPA and pre-reqs, what other things are considered in an applicant?



The Exploration Stage: Thinking about becoming a health professional?



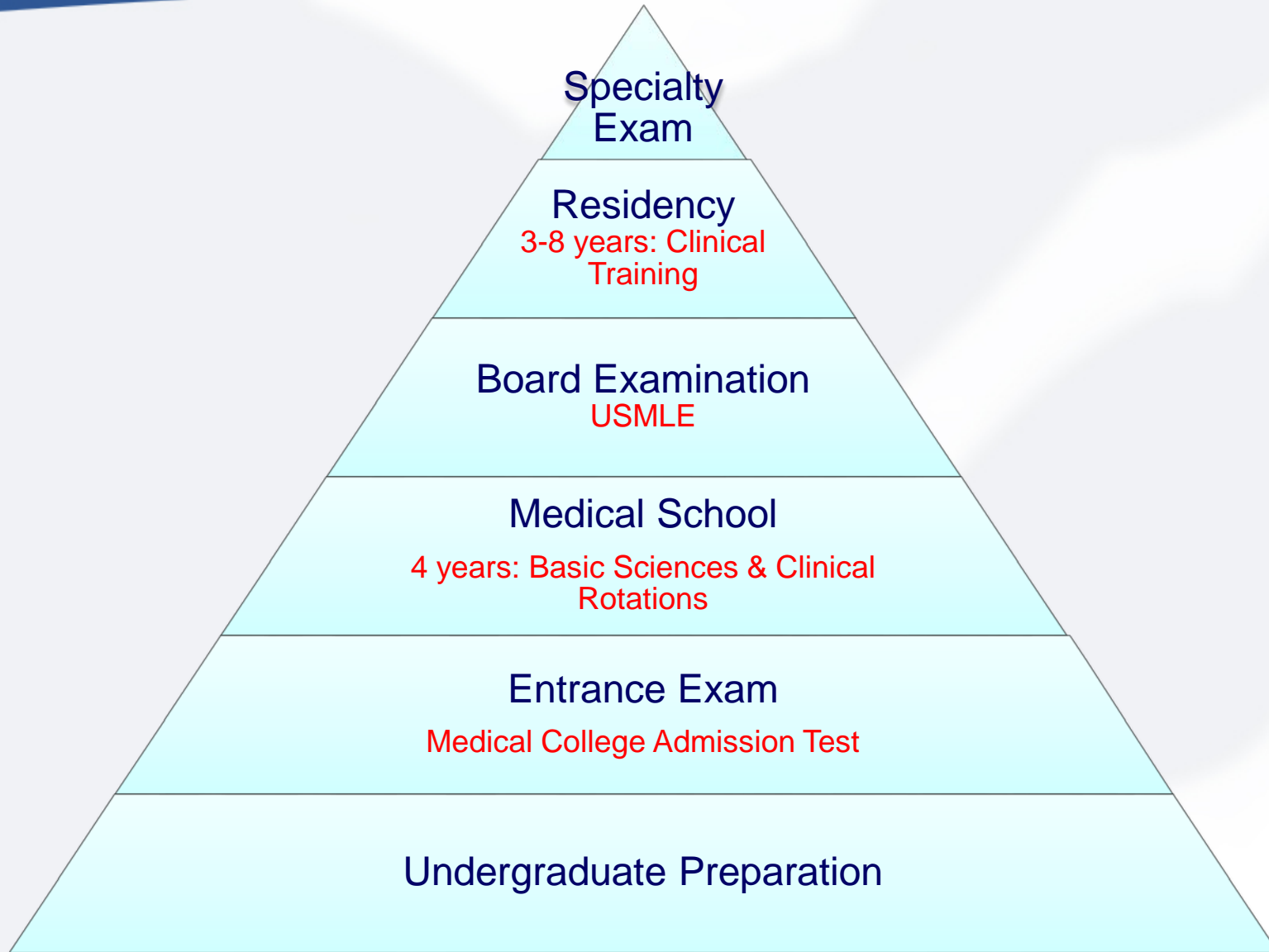
- Questions for self reflection:
 - Who or what is influencing your decision?
 - What about _____ interests me?
 - Do I ENJOY studying science?
 - Am I willing to prepare for a long course of study?
 - Am I committed to lifelong learning of people and of medicine?
 - Am I ambitious/motivated/hard working?
 - Do I want to help people feel better?

Is _____ a good fit?

- What do I know about a career _____?
- What is it like to be a _____?
- What is _____ school really like?
- Am I willing to make the commitment?



Educational Path



Medicine



MD vs. DO vs. DPM

- DO
 - Tenets
 - Body Unity
 - Structure influences function
 - Self healing mechanism
 - Rational treatment based on tenets
 - Residency – Primary Care Focus
- DPM
 - Specialize in diagnosing and treating conditions affecting the foot, ankle, and related structures of the leg

Pharmacy Settings

- Community Pharmacist - Chain Drug Store
- Hospital & Institutional Practice
 - Hospice/ Nursing Home/ Home Care Pharmacist
- Academic Pharmacist
- Managed Care Pharmacist
- Pharmaceutical and Health Care Distributors
- Long-Term Care and Consulting Pharmacy
- Public Health



Nursing: Educational Levels



Scholar: Doctorate (DNP)

Specialist: Masters level
(NP, CNA, etc.)

Professional: Bachelor's
level (BSN)

Technical: LVN, RN

What Do Medical Schools Require?



1. Bachelor's Degree or 3+ years of undergraduate work

Core Pre-Medical Requirements

- 1 yr. General Chemistry with laboratory
- 1 yr. Organic Chemistry with laboratory
- 1 yr. Biology with laboratory
- 1 yr. Physics with laboratory
- 1 yr. English (Composition + Literature)

Recommended (required at some schools)

- 1 yr. to 1 sem. of Calculus
- 1 sem. of Statistics (required at UCLA & UC Irvine)
- 1 sem. of Biochemistry (required at USC & UC Irvine)
- Upper Division Biology courses (UC Irvine requires at one):
 - Molecular Biology (required at USC), Physiology, Genetics, Immunology

No particular major is required or preferred

- Most students major in Biology

What Do Medical Schools Require?



2. Letters of Recommendation

- Most schools will ask for 3-5 letters
 - 2 from science faculty
 - 1 from non-science faculty
 - Additional letters from relevant volunteer, work, research and/or other involvements

3. Medical College Admission Test (MCAT)

Medical College Admission Test



MCAT

- Standardized exam to assess:
 - Academic preparation, achievement in science, verbal reasoning and written communication skills, and predicts which applicants perform adequately in medical school
- Computer Based Test
 - \$240
 - Total content time = 4 hours, 25 minutes
 - 28 administrations per year (January – September)
- MCAT 2015-changes to MCAT
 - www.aamc.org/mcat2015

Academic Considerations for Health professional School



- All attempted college courses are considered
 - Incompletes, CR/NC, W, Repeat
 - Community College coursework
- Study Abroad
 - International exposure
- Advanced Placement credit accepted?
 - varies from school to school
- Recency rules
 - varies from school to school



Quantitative Information

How competitive is the applicant pool?

Medical College Admission Test



Section	Range/Scale	Avg. for All Applicants (Fall 2010)	Avg. for All Matriculants (Fall 2010)
Verbal	1 – 15	9.1	9.9
Physical Sciences	1 – 15	9.4	10.4
Biological Sciences	1 – 15	9.8	10.8
Writing Sample	J – T	P (Median)	Q (Median)

Allopathic Medical School 2010 Entering Class Profile



Total Applications	First-Year Matriculants
42,742	18,665

Applicants		Matriculants	
Science GPA (BCPM)	3.43	Science GPA (BCPM)	3.61
Non-Science GPA	3.65	Non-Science GPA	3.75
Total GPA	3.53	Total GPA	3.67

Source: AAMC Applicants and
Matriculants Data 2010

CA Medical Schools 2010 Accepted Applicants



School	VR	PS	BS	WS	Overall	Science	Vol. / Com. Svc.	Med. Rel. exp.	Research
USC	11	11	12	Q	3.74	3.7	65%	90%	90%
Loma Linda	10	10	11	P	3.8	3.76	81%	80%	66%
Stanford	11	12	12	R	3.81	3.81	76%	90%	97%
UC Davis	10	11	11	Q	3.66	3.66	62%	95%	88%
UC Irvine	10	11	11	Q	3.74	3.72	68%	95%	95%
UC Los Angeles	10	11	12	Q	3.81	3.8	69%	93%	92%
UC San Diego	11	12	12	Q	3.86	3.88	64%	91%	94%
UC San Francisco	11	12	12	R	3.8	3.79	71%	91%	91%

CA Medical Schools Applied and Matriculant Data



Entering Class of 2010

School	Applied	Interviewed	Matriculated
USC	6,444	526	174
Loma Linda	4,977	375	165
Stanford	5,873	434	86
UC Davis	4,596	514	96
UC Irvine	4,844	506	104
UC Los Angeles	8,603	854	187
UC San Diego	5,451	687	125
UC San Francisco	6,481	511	165

Osteopathic Medical School 2010 Entering Class Profile



Total Applications	First-Year Matriculants	Total Enrollment
101,027	5,428	19,427

Matriculants GPA		Matriculants MCAT Scores	
Science GPA (BCP & Other Science)	3.36	Verbal Reasoning	8.69
Non-Science GPA	3.57	Biological Sciences	9.29
Overall	3.47	Physical Sciences	8.51

Colleges of Podiatric Medicine 2009 Entering Class Profile



Total Enrollment

687

Matriculants GPA		Matriculants MCAT Scores	
Science GPA (BCP & Other Science)	3.3	Verbal Reasoning	7.3
Non-Science GPA	3.4	Biological Sciences	7.7
Overall	3.3	Physical Sciences	7.1

PharmCAS School 2008 Admissions Update



Total Applications	Gender	
103,747	Men = 38.9%	Women = 59.6%

Applicants		Accepted PharmCAS Applicants	
Total GPA	3.25	Science GPA	3.35
		Total GPA	3.46

Nearly 80 percent of the applications to colleges and schools were submitted by individuals who had 3 or more years of postsecondary education.

Source: AACP Admissions Update Data
2008

A note about quantitative factors...



- GPA and test scores are ONE of many factors considered
 - It is important but not EVERYTHING
- You MUST be able to convince admissions committees that you can handle the rigorous curriculum of medical school
- After that, they want to know why they should pick YOU for their entering class
- Grades get you considered, but everything else gets you in!

The Big Idea: What Professional Schools Look for in Applicants?



1. Academic preparedness
2. Knowledge and commitment to the profession
3. Desirable attributes that are important for the profession

1. Academic Preparedness



- Demonstrated by:
 - GPA
 - MCAT
 - Performance in pre-reqs
 - Fulfill program requirements
 - Knowledge of content for standardized test
 - Rigor of course load
 - Upward trend

2. Knowledge and Commitment to the Profession



- Demonstrated by:
 - Exposure to the profession
 - Quality over quantity, depth over breadth
 - Personal experiences
 - Ability to articulate your motivations
 - Academic performance
 - Personal statement
 - Interview

3. Desirable Attributes Important to Health Professions



- Adaptability
- Critical Thinking
- Integrity
- Logical Reasoning
- Oral Communications Skills
- Personal Maturity
- Reliability
- Self-Discipline
- Work-Habits
- Compassion
- Commitment to serving others
- Cultural Competence
- Intellectual Curiosity
- Persistence
- Professionalism
- Resilience
- Teamwork
- Interpersonal Skills
- Leadership
- Love of Science/Learning

Demonstrated by:

- Extracurricular activities
 - Don't think of extracurriculars as "hoops" to jump through, rather, what does it say about you?
- Research
- What can you come up with?

Change your perspective



- Don't focus on thinking of ways to be the “perfect applicant” or what will “look good” on your medical school application
- Rather, seek opportunities that will help you become a better physician in the future or things that will make you grow as a person
 - By doing this, you will naturally be an attractive applicant

You Must Make the Commitment!



- Commitment implies:
 - Passion
 - Intensity
 - Persistence
- The psychic and physical energy that motivates
- Drives the effort
- Sustains the effort during difficult times

Source: Astin & Astin - W.K. Kellogg Foundation

It's not whether you can, but rather are you willing?

How will you demonstrate commitment...

- To school/education?
- To the activities that you are involved in?
- To serving others?
- To becoming a health professional?



Activity: You be the judge!

- Don't think of extracurricular activities as "hoops" to jump through, rather, what does it say about you?
- Look at these student profiles. What does the student demonstrate to you?



Benjamin Beach



- Science GPA 3.40
 - (upward trend, 4.0 in last 3 semesters)
- Overall GPA 3.52
- MCAT: 27
 - VR: 8, BS: 9; PS: 10
- Work part-time throughout college as an EMT
- Volunteer at a hospital
- Tutors on campus



The Application Stage

What does the application require?

Application Process

- Begins each year in June
 - Apply at the end of 4th year if you're on a 5 year plan for admission immediately following graduation
- 2 Step process:
 - Primary application
 - American Medical College Application Service (AMCAS)
 - American Assoc. of Colleges of Osteopathic Medicine Application Service (AACOMAS)
 - Secondary/Supplemental Application - to individual schools



Primary Application AMCAS/AACOMAS Sections



1. Identifying Information
2. Schools Attended
3. Biographic Information
4. Course Work
5. Work and Activities – up to 15 experiences
 - Clinical Exposure, Community Service, Leadership, Research, Work etc.
6. Letters of Evaluation/Recommendation
7. Medical Schools
8. Personal Statement
9. Standardized Tests

AMCAS/ AACOMAS Application Fees



- Fees
 - AMCAS- \$160 for the first school + \$32 for each additional school
 - \$ 768 for 20 schools
 - AACOMAS-\$ 175 for the first school + \$32 for each additional school*
 - \$ 783 for 20 schools*
- *If applied to at the time of original submission; after submission: \$50 for the first school, then \$32 for each additional school

Secondary Applications



- At the request of individual medical schools
- July to January
- Selectivity depends on program
- Components of Secondary application:
 - Pre-requisite satisfaction
 - Essays
 - Letters of Recommendation
 - Secondary Fee - \$30 to \$130

Interview



- Interviews from August through April
- Typical format:
 - Two one-on-one interviews with Faculty and/or current medical student
 - Open vs. Closed file
 - Tour, Financial Aid info., Q &A, lunch with students
- Admissions offers on a rolling basis
- Multiple Mini Interviews



Final Recommendations

You can gain admissions!

Pre-med expenses = expensive!



- Let's do the math...
 - MCAT
 - Prep courses
 - Application fees
 - Supplemental fees
 - Interview expenses
 - Professional attire
 - Flight
 - Other transportation
 - Hotel
- Save money now!!
- How can you keep costs down?
- Keep your debt low for medical school
 - Financial Information, Resources, Service, and Tools: FIRST
 - FIRST for Students and Applicants:
 - <http://www.aamc.org/programs/first/students/start.htm>

Tips



- Get academic support early
- Challenge yourself but take a course load you can excel in
- Get involved with student organizations, community service, clinical exposure, etc. NOW!!
- Keep in touch with your professors!
- Challenge yourself
- Be prepared for the cost- save your \$\$
- Apply Early!!

Resources



- Websites:
 - Explore Health Careers:
 - www.explorehealthcareers.org
 - Association of American Medical Colleges
 - www.aamc.org/students/start.htm
 - Medical School Admissions Requirements (MSAR)
 - » www.aamc.org/msar
 - American Association of Colleges of Osteopathic Medicine
 - www.aacom.org
 - Osteopathic Medical College Information Book
 - » <http://www.aacom.org/InfoFor/applicants>
 - American Association of Colleges of Podiatric Medicine
 - www.aacpm.org
 - American Association of Colleges of Pharmacy
 - www.aacp.org
 - American Association of Colleges of Nursing
 - <http://www.aacn.nche.edu>

Glossary



AAMC

• Association of American Medical Colleges

AACOM

• American Association of Colleges of Osteopathic Medicine

MSAR

• Medical School Admission Requirements

MCAT

• Medical College Admissions Test

BCPM

• Biology, Chemistry, Physics & Math

Primary Care

• Family Medicine, Internal Medicine, Pediatrics, OB/GYN – Obstetrics/Gynecology

Rolling Admissions

• As each application is received, it's reviewed. Interviews are offered and conducted. Decisions are then made at the next Admission Committee meeting.