

Chan, Daniel

A Statistical Report of BYU Premedical Students from 2002-2007

Faculty Mentor: David Kaiser, Preprofessional Advisement Center

In 2006 the average number of BYU medical school applications for any one applicant was 17. With the chance of matriculation per application only 3.8%, yet the cost of each application running as high as \$700 each, it is important for BYU premedical students to make informed decisions when choosing to which of 142 medical schools to apply.

In approaching this study I had previously proposed to make this a statistical *analysis* of BYU premedical students, but in doing so I realized that I would create a bias of the data in any interpretation thereof. As there is not an exclusively correct way of interpreting the given data, I decided that a better approach that would more ubiquitously serve BYU premedical applicants would be to present this as a statistical *report* in which the data is organized and presented, but the interpretation thereof is left up to the reader and to his or her individual needs.

As such, using data from the Association of American Medical Colleges (AAMC) for BYU 2002-2007 premedical applicants, I sorted the data into the most pertinent factors as I thought helpful from my perspective as a previous premedical applicant. These factors include:

1. Acceptance Rates
 - a. Per annum compared to national averages
2. MCAT Performance
 - a. Aggregate and per annum
 - b. Mean, median, max, min per section and also composite by total applicants, matriculated, accepted, and rejected
3. GPA
 - a. Aggregate and per annum
 - b. Science and cumulative GPA by total applicants, matriculated, accepted and rejected
4. Geography
 - a. Interactive online resource using Google Maps reporting BYU acceptances and matriculations to 142 medical schools (Figure 1)
5. Statistical Data Comparator
 - a. Interactive online resource using Excel spreadsheets containing 2002-2007 aggregate applicant data sort-able by: state, gender, disadvantaged status, undergraduate degree, undergraduate major, graduate degree, graduate major, post-baccalaureate degree, cumulative undergraduate science GPA, cumulative undergraduate all other GPA, cumulative total undergraduate GPA, post-baccalaureate science GPA, post-

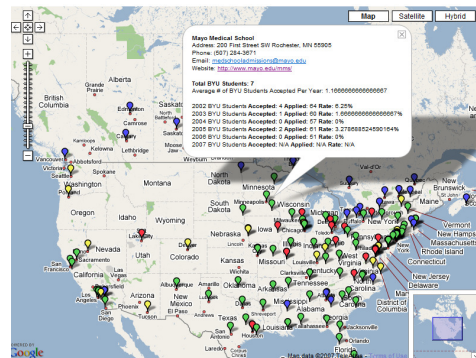


Figure 1: Online resource showing BYU premedical acceptances and matriculations to 142 medical schools

baccalaureate all other GPA, post-baccalaureate total GPA, graduate science GPA, graduate all other GPA, graduate total GPA, MCAT physical sciences sub-score, MCAT verbal reasoning sub-score, MCAT writing sample sub-score, MCAT biological sciences sub-score, MCAT composite score, applications count, accepted count, rejected count, matriculation status, and matriculated school.

6. Medical Schools

- a. 142 schools and contact information reporting each school's annual acceptances, acceptances by MCAT composite scores, acceptances by cumulative GPA, acceptances by science GPA, acceptances by gender, acceptances by application status (disadvantaged vs. non-disadvantaged), acceptances by state residency (resident vs. non-resident), and acceptances by major (science [biology, chemistry, physics, math as defined by AAMC] vs. non-science)

Much of the data interpretation presented in this report is left to the student user who can use tools such as the Statistical Data Comparator to customize the data to meet his or her exact profile. Further, the comprehensive per school coverage of each medical school offers a unique insight into traditional vs. non-traditional applicant trends, state residency trends, and even BYU applicant reputation trends.

The report spans 289 pages and is pending publication for use and for reference in BYU's Preprofessional Advisement Center with an electronic version and online resources to be integrated into BYU's Prehealth website at <http://ccc.byu.edu/healthpro/>

As a former BYU premedical student and also a Student Advisor in the Preprofessional Advisement Center, I find this assembled resource as a unique and invaluable perspective of BYU applicant data. By using this resource I am confident that BYU premedical students will be able to better assess their application opportunities based on prior BYU student experiences. More importantly, student applicants will be able to customize the given data in any helpful way to suit their exact needs thus optimizing their chances of successful application, while minimizing the costly overhead of withdrawn application selections.