



From: GRO Executive Board
Date: 13 November 2020
Subject: Statement on Racial Justice

Dear Homewood Graduate Board,

We write today to call on you to advocate for, in the strongest possible terms, the permanent removal of the GRE as an admissions requirement for graduate programs on the Homewood campus of Johns Hopkins University.

Johns Hopkins University is a recognized leader in higher education, especially in research. We are the nation's leading investor in [research as of 2018](#), as well as ranking #10 in global university rankings from the US News and World Report. This status is based on the collective efforts of our talented colleagues, who hail from across the nation and the world and contribute to our world class education and research. However, many would-be colleagues are deprived of the chance to join our community due to the Graduate Record Examinations (GRE). Research data over many years has suggested that not only does the GRE fail to perform as an objective metric to predict graduate student success, but it also acts as a significant barrier to entry for numerous students, negatively impacting both prospective students and universities. In particular, qualified women, minorities, and people from economically disadvantaged backgrounds are often overlooked, or are stopped from submitting an application by the GRE. These lost opportunities to diversify our community have negative impacts across the campus, and in the long term could significantly impact the university's campus life, research output, and reputation.

The Effect of the GRE on Diversity and its Relationship to Academic Success

Recent research has made it clear that the GRE does not predict whether students will succeed in their degree programs, nor does it reliably predict how graduates will perform in the workforce. The GRE is instead an indicator of race, gender, and socioeconomic status. It has been an unrelenting obstacle that has prevented minorities and those from economically disadvantaged backgrounds from being recognized for their merit. In a column published in the journal *Nature*, Professors Miller and Stassun reported that women score 80 points lower on average in the GRE physical sciences exams than men do. Meanwhile, African Americans score 200 points lower than white Americans do [\[1\]](#). Assessing applicants on these scores would therefore indicate that both of these groups are unprepared for the rigors of graduate school, yet research shows that



such an assessment is unwarranted. Work published by Liane Moneta-Koehler, the Director of Research Development at Vanderbilt University, evaluated the performance of their nearly 500 life sciences students. The study reported that, while the GRE was a moderate predictor of first semester course grades, no correlation was found between higher GRE scores and reduced time-to-degree, number of publications, or pass rates in qualifying exams. The GRE was not reliable in predicting who would graduate with a Ph.D. or write successful grant applications [2]. A 2019 study of physics students conducted by C.W. Miller also found that GRE scores failed to predict doctoral completion [4]. Additionally, a multi-institutional study found that GRE scores did not predict time to degree or indicate who would leave during or after the first year. This study also found that in engineering, men in the lowest quartile for GRE Q scores completed their programs at a rate 25% higher than those in the highest quartile [3]. The effects of the GRE in unfairly limiting the admission of women is of particular concern in STEM fields, as women earn only 25% of STEM PhDs [3].

The GRE has contributed to the lack of diversity at universities across the country. As of 2019, only 24% of Engineering PhD students at JHU identified as female and only 11% of PhD students across all divisions of our university identified as an underrepresented minority based on the Provost's [2020 Report on Graduate Student Composition](#). We are a university that prides itself on the diversity and academic success of our students. President Daniels and Provost Kumar emphasized in the Roadmap on Diversity and Inclusion, "Diversity of people, thought, experience, and background is fundamental to the mission of this university." Requiring the GRE is inconsistent with these mission statements. We are aware that some preliminary research performed by Dr. Sri Sarma in the office of the Dean of the Whiting School of Engineering indicated that the GRE can be correlated to time-to-degree based on a dataset of around 180 students. However, the correlative value is relatively low for the GRE Q score, somewhat higher for GRE Analytical Writing, and *negative* for GRE Verbal Reasoning - meaning the model indicates that higher verbal scores in engineering students lead to longer time-to-degree. Further, the model gave significantly more weight to students' gender, and whether they came from an international school - both of these factors dwarfed all of the GRE components in predicting time to degree. Whether this model could be validated with a larger dataset and a more accurate assessment of graduate student success (such as publications, fellowships, and post-graduate employment) is unknown, but studies across many other schools suggest it is unlikely. Regardless, at best the model indicates that GRE scores need to be read contextually in an application, with a holistic view of the candidate- something that can be challenging to enact or enforce. Simply removing it, as its predictive power is little at best (and discriminatory at worst), would provide a more inclusive and equitable admissions process.



Economic Consequences of GRE

The GRE not only discriminates based on race and gender, it discriminates against socioeconomically disadvantaged families [1], [5]. According to Peter Sacks in *Change: The Magazine of Higher Learning*, the ETS (the maker of the exam) self-reported that GRE test scores are highly associated with parental income and education levels [5], [6]. The exorbitant cost of the test and associated expenses can also be prohibitive for less privileged, but undoubtedly qualified, students. For example, the GRE registration fee is \$205, which does not include test preparation (a typical course is \$400) or the fees to send scores to your preferred institutions (\$27 each after the first four). Additionally, exams are often only offered in major metropolitan areas. Many students have to undertake significant expenses just for travel and overnight lodging to take the exam. Because of the COVID-19 pandemic, access to exams is even harder and more expensive. If a prospective student takes the GRE more than once and sends a composite score of best attempts, the cost is an additional \$150. For students who are socioeconomically disadvantaged and potentially deep in student loan debt, these expenses are insurmountable. There may be an untapped pool of academically prepared students whose applications would never be seen by an admissions committee because the expense deters them from submitting applications. By continuing to require the GRE for admissions, we are further damaging our diversity and promoting income inequality.

US News and World Report Rankings

We understand and acknowledge the importance of our rankings to our perception by others in the world. When prospective students are considering universities, the US News and World Report (USNWR) rankings are among the primary resources that they may consult. Performing well on these rankings is important to ensuring that the best and brightest students are encouraged and interested in applying to Johns Hopkins. There are also trends, at least for undergraduate programs, that higher rankings can inspire greater philanthropic support. We recognize that by eliminating the GRE as an admissions requirement, we run the risk of having a lower ranking in USNWR, specifically for engineering graduate programs.

However, the benefits of eliminating the GRE as an admissions requirement far outweigh these costs. When we turn away students based on test scores, we are often rejecting talented students not on the basis of their academic ability, but rather their race, gender, or socioeconomic background. We simply lose access to all that talent. Since the data shows that there is a weak correlation between the exam and success in graduate school, and the test contributes to sustained inequality in graduate education, we must question why USNWR still uses the exam to evaluate a program's merit. We have the opportunity to be leaders in the field, to galvanize other



top universities to remove the GRE as an admissions requirement, and push for change in the USNWR ranking metrics for the general betterment of higher education.

Programs That No Longer Require The GRE

Many of our academic peers and national funding agencies have already ceased using the GRE to evaluate programs for ranking and students for admissions. For example, the NSF Graduate Research Fellowship Program application has not required GRE scores since 2010. Since 2015, the same has been true of the NIH T32 grants and F30 and F31 fellowship applications. These changes have encouraged biomedical programs here at JHU to eliminate the GRE requirement, and the results of this decision have been promising. For example, the graduate program of Cellular and Molecular Medicine at JHUSOM reported an increase in total number of applications by 43% after abolishing the exam requirement in 2018. They also observed an increase in the first-year GPA of matriculating students from 3.52 to 3.75. In the 2019-2020 application cycle, 50% of the life sciences programs at the 50 top-ranked U.S. research universities did not require the GRE, programs that include Harvard University, Columbia University, and Mayo Clinic [7]. Engineering programs across the country, unfortunately, have been more recalcitrant and the GRE is still required at many peer institutions, with the notable exception of the Electrical Engineering and Computer Science departments at MIT, which removed the GRE and remained highly ranked departments. We have the opportunity to emerge as the leader among our peers in increasing diversity among graduate students by removing the GRE requirement.

Conclusion

We hope that you will reconsider requiring the GRE for admission into our university. We firmly believe that the GRE's role in graduate admissions causes more harm than good for the university. The GRE is not an adequate indicator for academic performance and intellectual ability. The monetary cost of the exam disadvantages swathes of prospective students, thereby reducing diversity and diminishing the capabilities of our institution. Likewise, students from certain backgrounds are at a disadvantage when taking the exam due to the cultural biases inherent in standardized exams. Altogether, this exam deprives graduate students and faculty of the opportunity to collaborate with diverse and gifted colleagues, which is critical to success in our increasingly globalized society. Even for those students who were able to afford the time and money to take and perform well on the GRE, it fails in its core purpose of providing an objective and quantitative metric to predict success in graduate school. While we recognize the concern that our program rankings in US News and World Report depend in part on our GRE scores, we believe that these same programs would be substantively improved by abandoning the GRE.



We are at a pivotal moment in history as the disruption to normal admissions cycles due to COVID-19 has given us a clear pathway to a more equitable future for admissions. We can be leaders in this field by abandoning the GRE altogether and by encouraging peer institutions to follow our example. Through these actions, we can experience a wave of new, diverse, enthusiastic applicants who can bring our university to even greater heights.

Sincerely,

The Graduate Representative Organization

References

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