

# Comparing the perspectives of students and faculty on Graduate Admissions

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STEM Transformation Institute

FLORIDA INTERNATIONAL UNIVERSITY



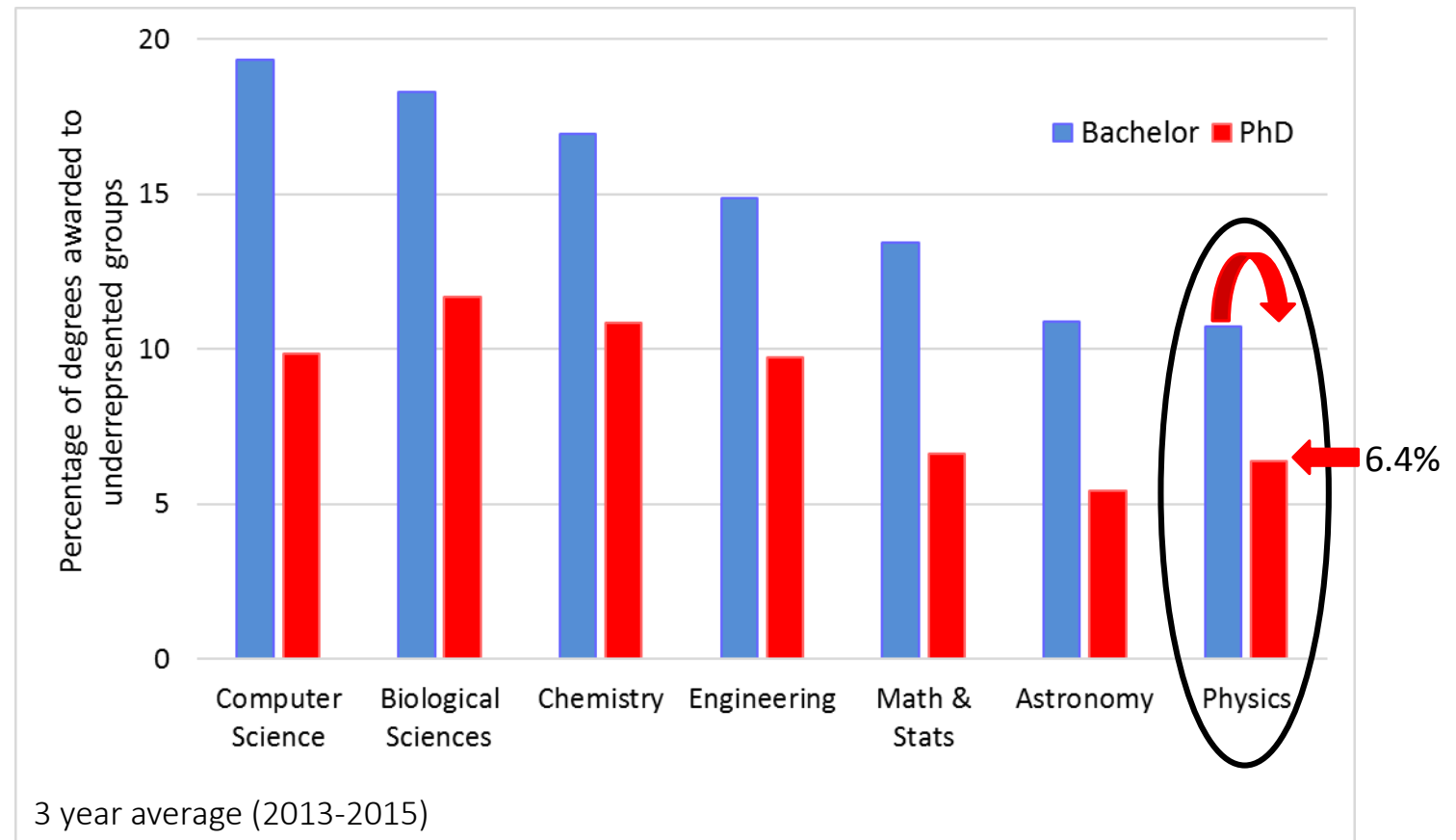
# Motivation: State of physics diversity

Physics is one of the least diverse disciplines.

Clearer, smoother, and fruitful pathway to PhD

## APS Bridge Program:

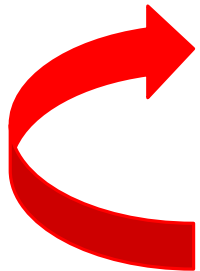
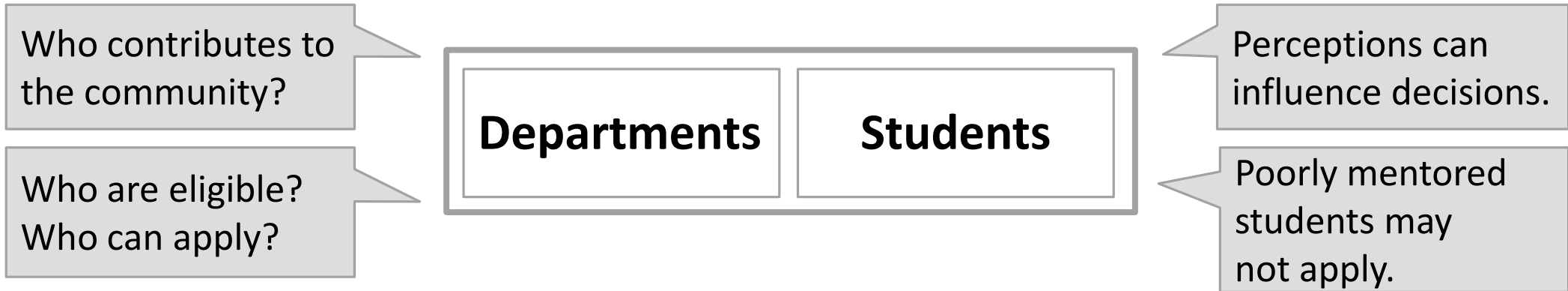
Increase the representation of underrepresented (UR) racial groups at graduate physics.



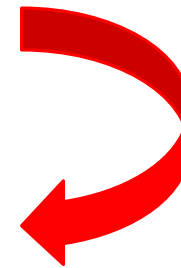
Credit: APS/Source: IPEDS Completion Survey

# Graduate admissions- what is essential?

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- Identify normative admission practices of graduate physics departments.
- Study students' perceptions about graduate admissions.



# Graduate admission Survey: solicitation and response

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## GAS survey: Doctoral departments (2013)

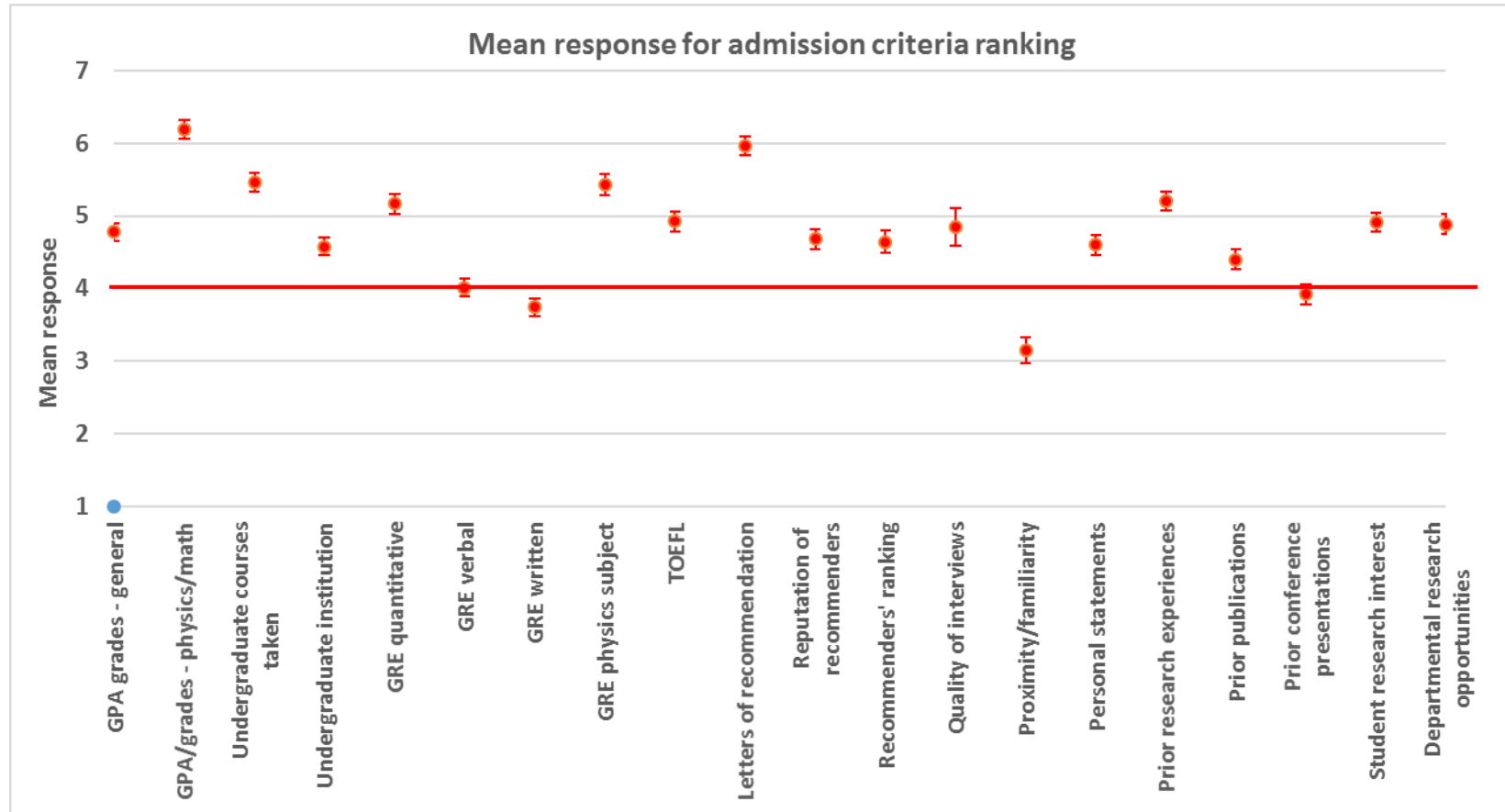
- Solicited responses from 199 institutions.
- Received responses from 170 individuals at 149 institutions.
- 75% response rate, representing about 85% of active PhD programs.

## PGCI survey: Undergraduate majors (2016-17)

- Solicited through AIP.
- Received response from 1031 students.
- 25% Female, 4% identified as Black or African-American, 12% identified as Hispanic, Latino, or Spanish origin.

# How important do you think the following criteria are for a successful graduate school application?

7 point scale running from "Least important" to "Most important"

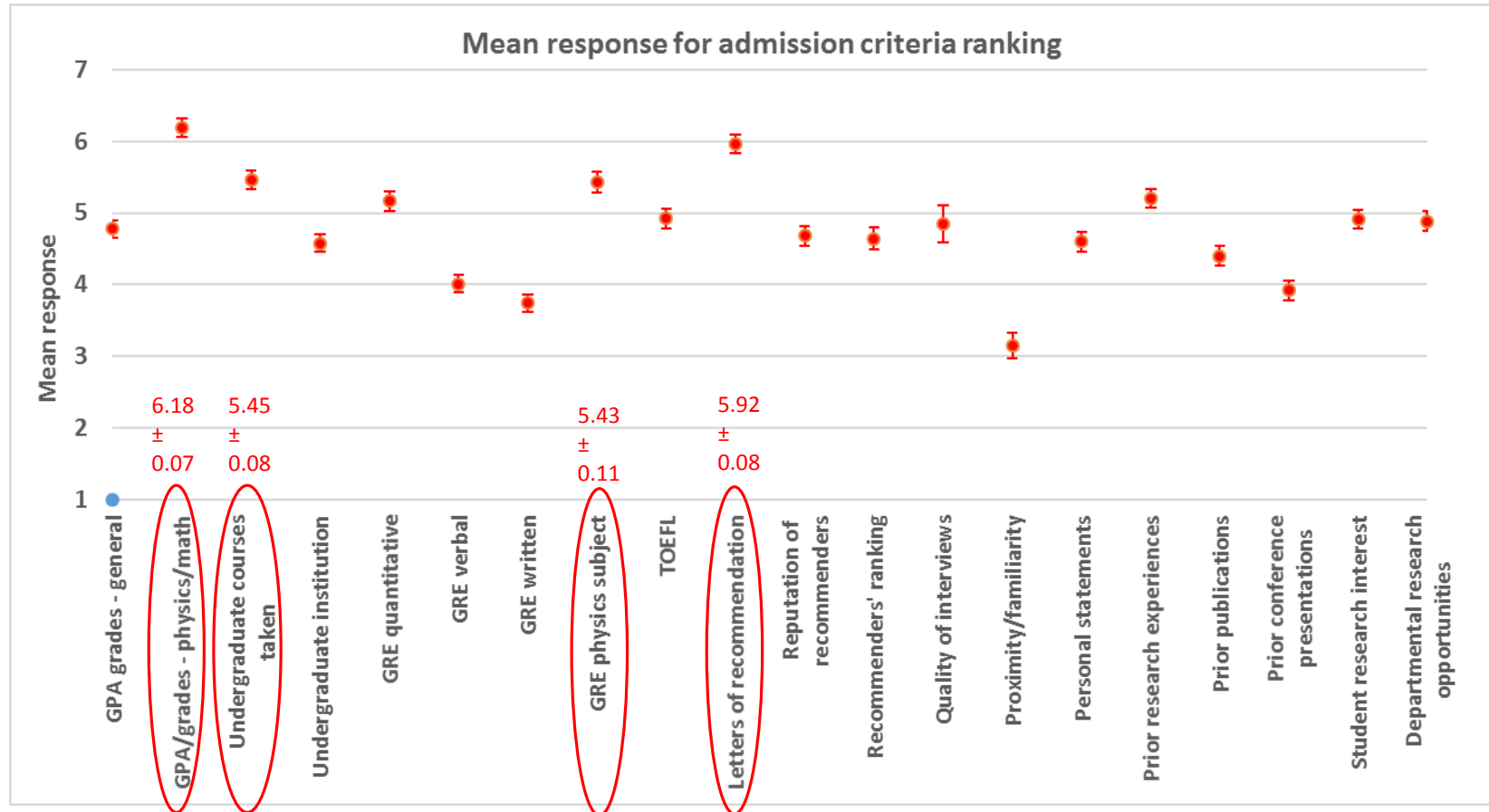


## Departments

Simultaneously consider many factors as 'relatively important'

# How important do you think the following criteria are for a successful graduate school application?

7 point scale running from "Least important" to "Most important"

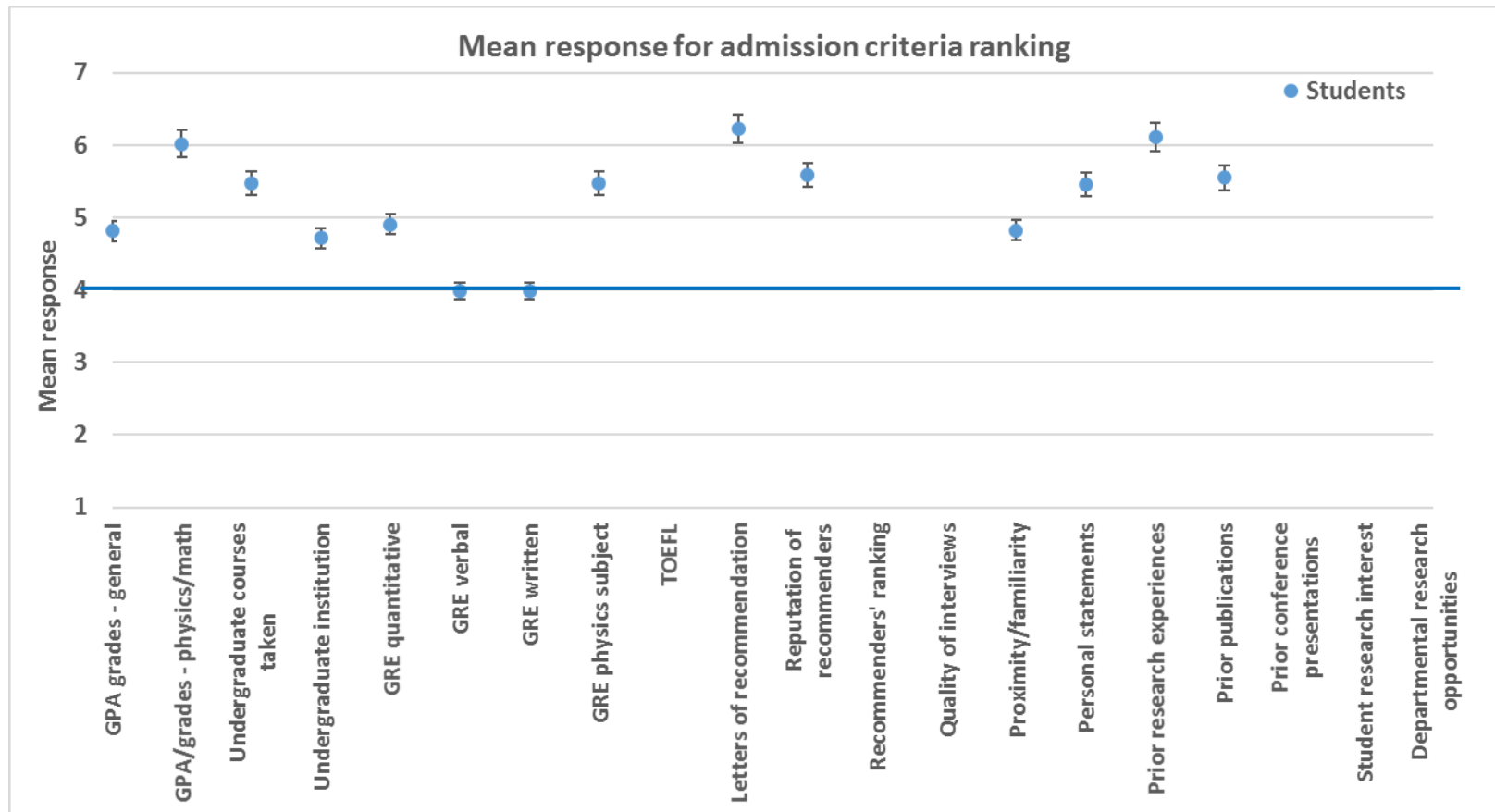


## Departments

- GPA/grades-physics/math
- Letters of recommendation
- Undergraduate courses
- GRE Physics subject score

# How important do you think the following criteria are for a successful graduate school application?

7 point scale running from "Least important" to "Most important"

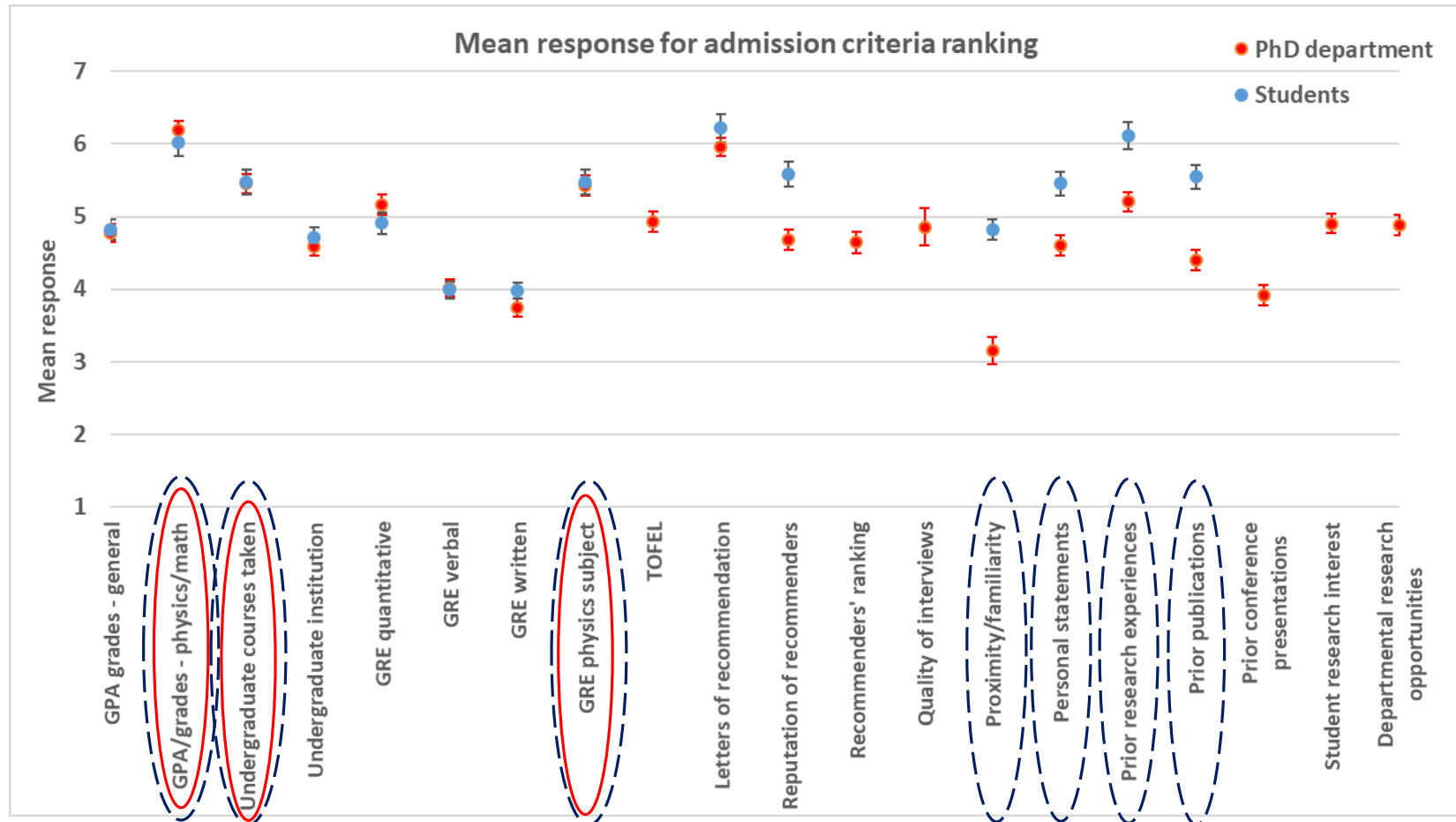


## Students

Students rate everything high.

# How important do you think the following criteria are for a successful graduate school application?

7 point scale running from "Least important" to "Most important"



## Notable agreements:

- GPA/grades
- Undergraduate courses
- GRE Physics subject score

## Departures:

- Familiarity
- Personal statements
- Prior research
- Prior publications



# Conclusions

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- ❑ Students rate every admission criteria high. Mentoring about graduate admissions is important.
- ❑ Recommendation letters: avenue for successful transition to PhD.

# Acknowledgement

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☐ NSF award #1143070.

☐ AIP

☐ APS Bridge Program Team

☐ STEM Transformation Institute, FIU

Visit our PERC session on “Graduate admissions and diversity in physics”  
27 July (**@10.45 AM**, Meeting Room **4**)

Potvin, Chari & Hodapp (2017) “The Graduate Admissions Landscape: Investigating Approaches to Diversity in a National Survey of Physics Doctoral Degree Programs” **Phys Rev PER** (under review)