

Research Year: What is the True Cost?

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Introduction

Dedicated research years during medical school are becoming more common among applicants to integrated plastic surgery programs.

Year-long research experiences can provide students with valuable skills and allow for cultivation of long-term, meaningful mentor-mentee relationships.

Many research positions made available to medical students are unpaid or underpaid.

The financial implications associated with a research year during medical school are often overlooked and/or unconsidered.

Previous literature has discussed potential barriers associated with a research year, including those that are cost-related; however, no study has quantified the cost.

This study aims to estimate the cost of a research year during medical school, accounting for both cost of living and loan interest accrual.

Methods

Cost of Living

National Institutes of Health (NIH) Research Portfolio Online Reporting Tools (RePORT) used to identify top 50 NIH-funded medical schools in 2022.¹

Massachusetts Institute of Technology (MIT) Living Wage Calculator used to determine the cost of living in each county/county equivalent associated with a top 50 NIH-funded medical school.²

Additional Loan Interest Accrual

Association of American Medical Colleges (AAMC) Tuition and Student Fees Report used to determine mean cost of attendance to medical school and calculate annual percent increase in cost of attendance from 2018-2023.³

Identified and calculated average annual fixed interest rate for federal direct unsubsidized loans disbursed from 2018-2023.

Calculated estimated annual interest accrual during standard four-year medical school curriculum.

Estimated Research Year Cost

Location (cost of living) + Timing (additional interest accrual)

Results

Table 1 – Mean and median costs of living within each geographic region.

	Northeast	Midwest	South	West
Mean Cost of Living	\$40,298	\$35,644	\$36,852	\$44,975
Median Cost of Living	\$36,753	\$34,541	\$37,422	\$44,800

Figure 1 – Heatmap illustrating average cost of living in counties within each state containing a top 50 NIH-funded medical school.

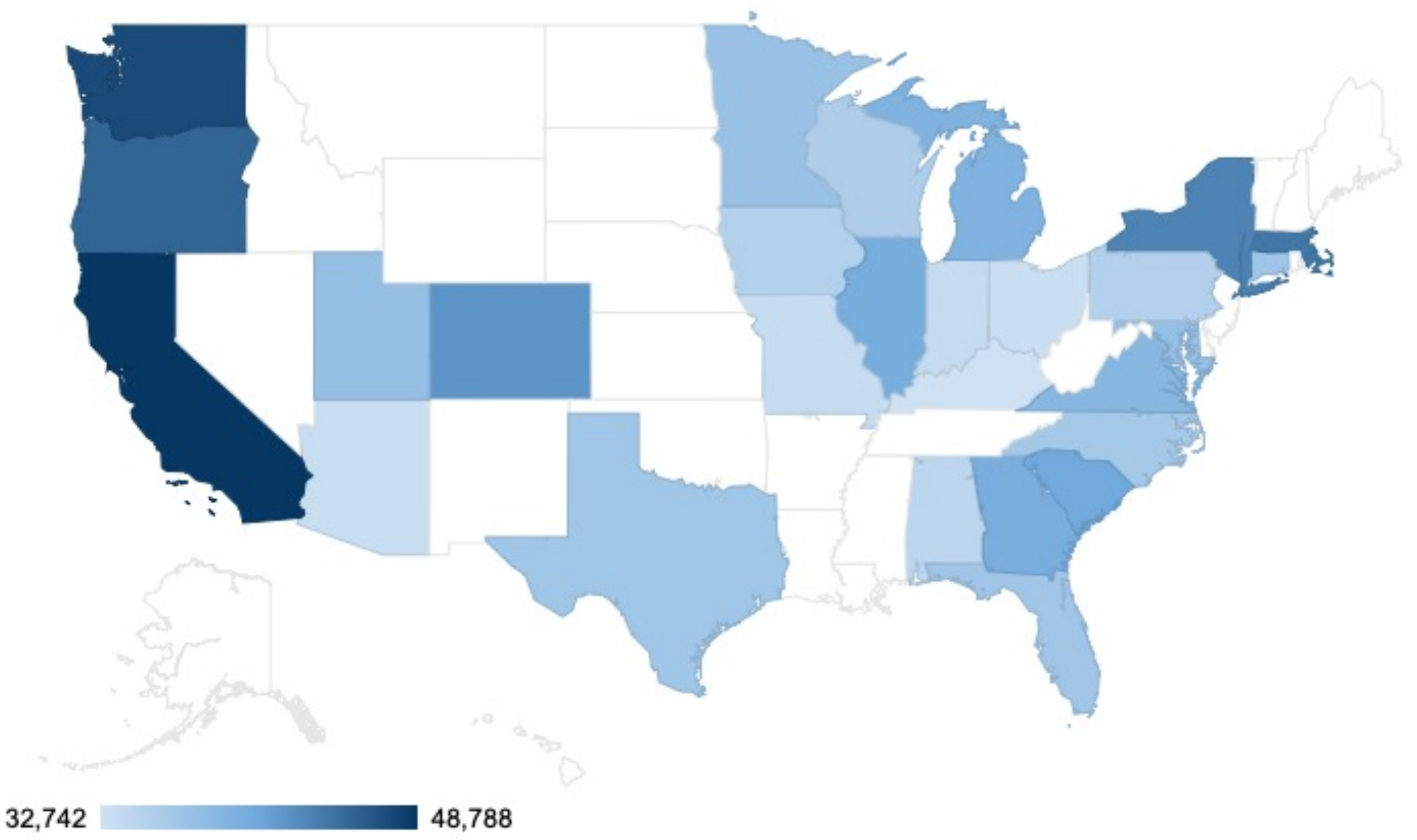


Table 2 – Estimated *additional* interest accrual incurred due to a research year.

	Additional Loan Interest Accrual	
Research Year Between	Public Medical School	Private Medical School
MS1-2	\$3,177	\$5,044
MS2-3	\$5,873	\$9,393
MS3-4	\$8,521	\$13,640
MS4-PGY1	\$11,124	\$17,789

Interest Accrual = Loan Principal * (1 + Interest Per Day)^{Days}

Number of top 50 NIH-funded medical schools in each geographic region:

Northeast (11), Midwest (13), South (15), and West (11)

Highest cost of living: Santa Clara County (Stanford University) - **\$55,860**

Lowest cost of living: Forsyth County (Wake Forest University) - **\$32,112**

The estimated cost of a research year ranges from **\$35,289** to **\$73,649** depending on **location**, **timing**, and **type (public vs. private) of medical school** attended.

Conclusions

Research years can invoke a significant financial burden associated with cost of living and loan interest accrual.

Cost of living varies widely between geographic regions and is highest in the West.

Additional loan interest accrual is heavily dependent on timing of a research year and type of medical school attended (public vs. private).

Research years may be cost-prohibitive to individuals without access to financial support.

Intentional efforts must be made to ensure feasibility and availability of equitable and funded research year opportunities for students of all backgrounds.

References

1. National Institutes of Health. NIH Research Portfolio Online Reporting Tools (RePORT). Accessed August 1, 2023. Available from: <https://report.nih.gov/award/index.cfm?ot=MS&fy=2022&state=&ic=&fm=&orgid=&distr=&rfa=&om=n&pid=>.
2. Glasmeier, Amy K. Living Wage Calculator. 2023. Massachusetts Institute of Technology. <https://livingwage.mit.edu>.
3. American Association of Medical Colleges (AAMC). Tuition and Student Fees Report, 2013-2014 through 2022-2023.xlsx. Accessed August 1, 2023. Available from: <https://www.aamc.org/data-reports/reporting-tools/report/tuition-and-student-fees-reports>.