

Characteristics of Funding for Maternal-Fetal Medicine Investigators in Obstetrics

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Introduction

- The National Institutes of Health (NIH) is the largest public funder of biomedical research worldwide and remains highly valued in academic medicine.
- The objective of this study to evaluate the difference in NIH funding between maternal-fetal medicine (MFM) specialists and non-MFM Principal Investigators (PIs).

Methods

- Cross sectional analysis studying all active projects on the NIH RePORTER website in April 2022 carrying the tags: "Obstetrics," "Maternal-Fetal Medicine (MFM)," and "Perinatology."
- Information about individual Principal Investigators (PIs) were obtained from their institutions websites, SCOPUS database, and LinkedIn profiles. Subgroup analysis was performed on all projects with MFM specialists PIs.
- Data was analyzed using Chi-square and Kruskal-Wallis tests with an $\alpha < 0.05$.

Results

- **609** total studies were found and **39** of the total projects had PIs who were MFM specialists. Non-MFM PIs included physicians from other specialties, midwives, PIs holding PhD, and nurses.
- MFM PIs had significantly **lower average of current active NIH funding** than their PIs from other specialties (\$1,040,750 vs \$4,812,368 $p=0.03$) and **cumulative career-long funding** (\$7,784,877 vs \$22,499,894 $p=0.01$) (Table 1, Figure 1).
- MFM PIs had on average a lower H-index (measuring citation impact and productivity) than their non-MFM counterparts, however the difference was not statistically significant (23 vs 29 $p=0.06$) (Table 1).
- MFM PIs were more likely to have a **shorter time since the end of training or end of education** than PIs from other training backgrounds (11 vs 18 years $p < 0.01$).

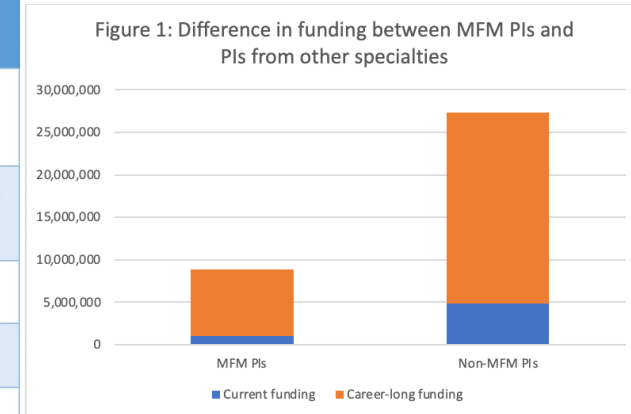
Discussion

- When examining NIH funding, MFMs are a **minority of all PIs** in obstetrical research.
- MFMs are awarded **smaller amounts of funding** in obstetrical research than non-MFM PIs.
- MFM physicians often hold a **clinical role**, leaving less protected research time, which could be a possible cause of this difference.
- Despite this, differences in publications were not noted, as reflected by the H-index.



Table 1. Principal Investigator Characteristics Across Specialty

Variable	Specialty		p-value
	Non-MFM n= 570	MFM n= 39	
Career-long funding (\$)	\$22,499,894 (33,983 - 1,870,181,005)	\$7,784,877 (189,986 - 77,819,514)	0.01
Current funding (\$)	\$4,812,368 (31,970 - 573,403,306)	\$1,040,750 (76,338 - 4,765,341)	0.03
H-Index	29	23	0.06
Years since training (yrs)	18	11	0.01
Project Type			
R01	244 (42.8%)	14 (35.9)	0.28
K	104 (18.4%)	14 (35.9)	0.02



MFMs are awarded smaller amounts of funding in the field of obstetrical research than PIs from other specialties. As the field of academic MFM grows, it is important to investigate ways to increase funding of obstetrical research performed by MFM providers.

