Gender Differences in NIH Funding in Obstetrics

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Introduction

- In academic medicine, research productivity is one of the most important drivers for advancement among academic physicians. National Institutes of Health (NIH) funding is considered the "Gold Standard" of biomedical research funding and is highly sought after.
- The goal of this study is to evaluate the distribution across genders of current NIH-funded studies pertaining to Obstetrics.

Methods

- Cross sectional analysis examining studies on the NIH RePORTER website in April 2022.
- Active projects with the following tags were collected: Obstetrics, Maternal-Fetal Medicine (MFM), Perinatology.
- Demographic and academic variables collected from university websites, LinkedIn, and SCOPUS.
- Data was analyzed using Chi-square and Kruskal-Wallis tests with an $\alpha < 0.05$.

Results

- N=609 studies. 368 (60.4%) women PIs, 239 (39.2%) men PIs, 2 (0.33%) PIs identified as "they".
- Men had **higher average funding amounts** across their career ($34,479,470 vs $13,763,198; $p < 0.001$) and **higher H-indices** (34.3 vs. 24.9; $p < 0.001$).
- More women were awarded **K grants** than men (men 13.4% vs women 23.6%, p=0.018).
- No significant difference between women and men holding **R01 grants** (40.8% vs 44.8% p=0.51)
- 39 **MFM PIs** were found. **No significant differences** between men and women in R01 grants, K grants, cumulative career NIH funding (Table 1).
- Men MFM PIs had **higher average H-indices** (measuring citation impact and productivity) than women MFMs (28.7 vs. 10.7, p=0.047).
- Nationally, only **8 academic institutions** host the majority (53.4%) of all MFM PIs with an active NIH project with the studied keywords (Figure 1).

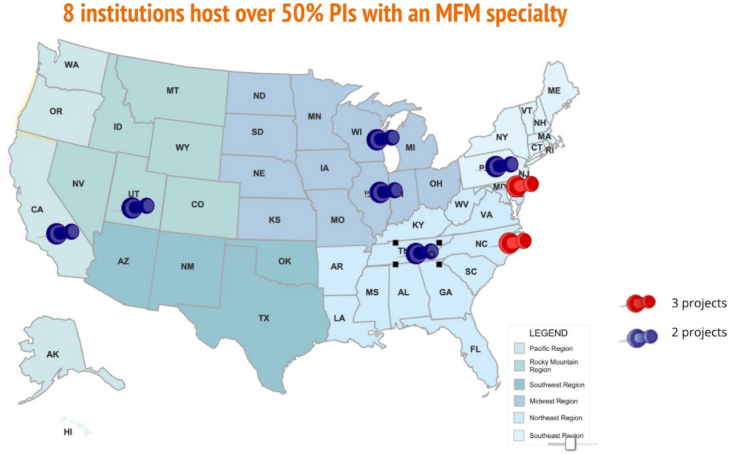
Discussion

- While women have more NIH-funded studies than men, they have **lower average cumulative funding and H-indices**.
- The disparities seen among all PIs **were not seen within MFM physicians**, except regarding **H-indices**.
- Gender disparities in funding and publications continue to exist in NIH-funded studies in obstetrics.

Table 1. Maternal Fetal Medicine Principal Investigator Characteristics Across Gender

Variable	Gender		p-value
	Men n=11(28.2%)	Women n=28 (71.7%)	
Career-long funding ($)	$21,767,182 (342,956 - 77,819,514)	$2,495,210 (189,986 -15,372,771)	0.09
Current funding ($)	$1,727,991 (171,770 - 4,765,341)	$780,785 (76,338 - 3,903,747)	0.13
H-Index	28.7 (16 - 87)	10.7 (3 - 41)	0.05
Years since training (yrs)	11.8 (3 - 30)	10.8 (0 - 24)	0.90
Dual Degree PI	6 (54.5%)	15 (53.6%)	
Rank			0.23
Professor	6 (54.5%)	7 (25.0%)	
Associate	3 (27.3%)	7(25.0%)	
Assistant	2 (18.2%)	11(39.3%)	
Project Type			
R01	5 (44.8%)	9(40.8%)	0.89
K	3 (27.3%)	11 (39.3%)	0.40

Figure 1: Map of Location of Maternal Fetal Medicine PIs by Academic Center



While women have more NIH-funded studies than men, they have **lower average cumulative funding and H-indices**. The disparities seen among all PIs **were not seen within MFM physicians**, except **in H-indices**.

Society for Maternal-Fetal Medicine

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