

# Gender Discrimination Lawsuit Houston College Of Medicine

STANCE: GENDER DICSRIMINATION AGAINST WOMEN IS PRESENT



#### PRESENTED BY TEAM1

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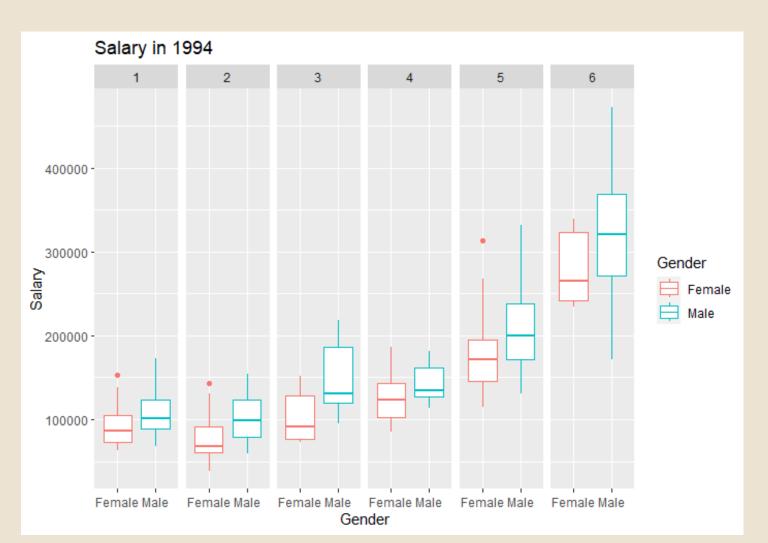
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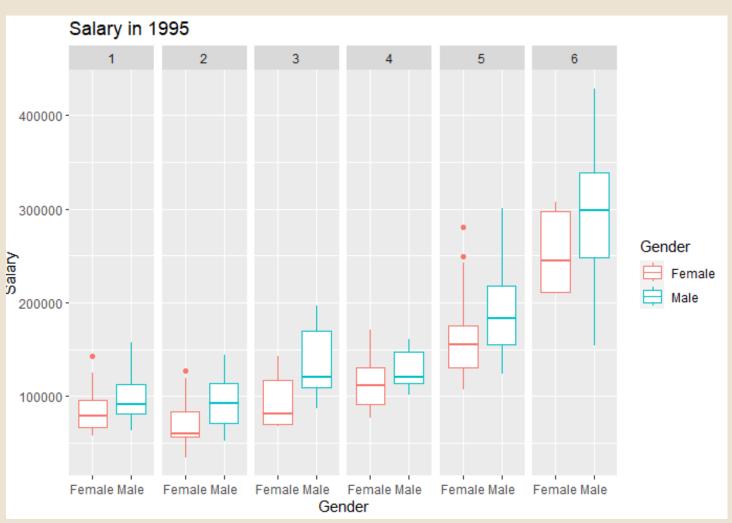
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### Sareen Yogya Hridey

# Salaries Range of Doctors Across Departments





In all 6 departments of the hospital, we can see that female doctors earn less than their male counterparts

It is also the case that the minimum and maximum wage of female doctors in every department is lower than male doctors

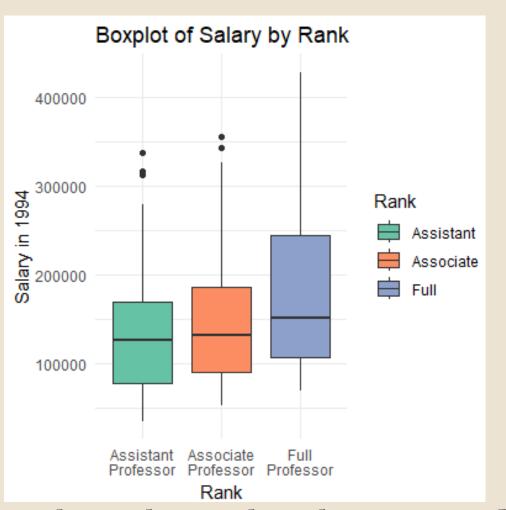
# Predicting salary across gender

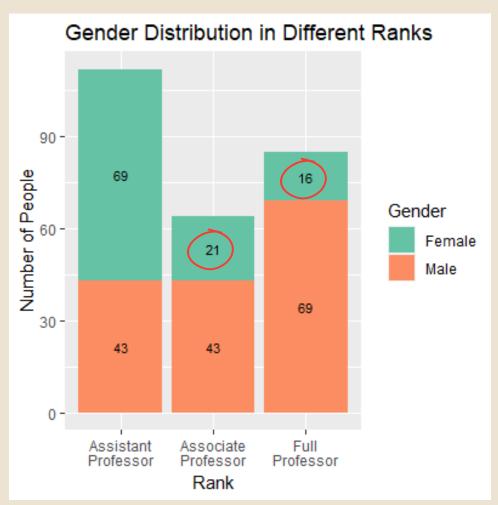
The model shows among all the four main elements, gender and experience **play most significant roles**. Even with all other conditions same, the salary is **over \$30,000 higher for male** doctors than female doctors.

	(1) rank	(2) rank	(3) rank
gender	0.301***	0.335***	0.342***
	(0.0877)	(0.0896)	(0.0911)
cert	-0.123	-0.0562	-0.0558
	(0.0898)	(0.0975)	(0.0976)
exper	0.0822***	0.0793***	0.0790***
	(0.00692)	(0.00709)	(0.00716)
prate		0.0397	0.0549
		(0.0232)	(0.0410)
clin			0.0699
			(0.155)
_cons	0.965***	0.731***	0.612
	(0.0987)	(0.169)	(0.312)
N	261	261	261
R-sq	0.448	0.454	0.455

Salary in 1994 = \$23749 + \$3271 per year since obtaining MD + \$33156 (if you are a male) + \$40865 (if you are certified) + \$77089 (if you are clinical emphasis)

# **Exploring Frequency Of Rank Across Gender**





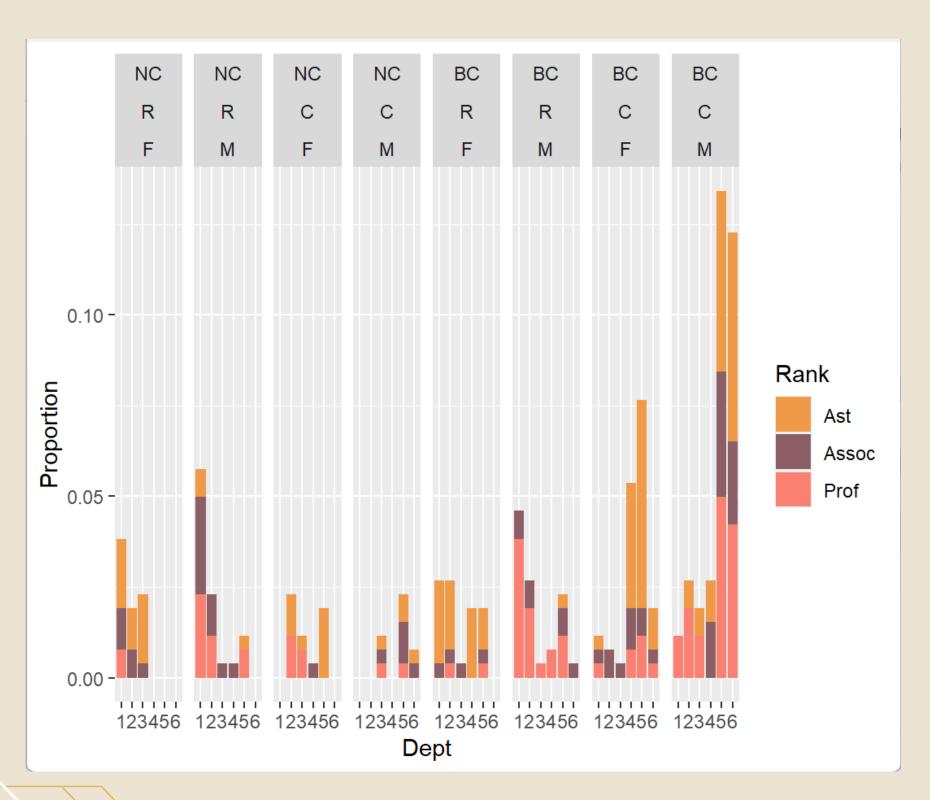
The bar chart shows that there are **only 21 associate professors and 16 full professors among female professors**, while there are 43 associate professors and 69 full professors among male professors.

The box plot shows that **full professors** have the **highest salaries**, followed by associate professors, and assistant professors have the lowest salaries.

The graphs suggest that **female professors are less likely to have higher academic titles thus higher salaries** than male professors. The **gender disparity** possibly exists.

#### LEANDRA GUNNION

# **Exploring Proportion of Ranks Across Gender**



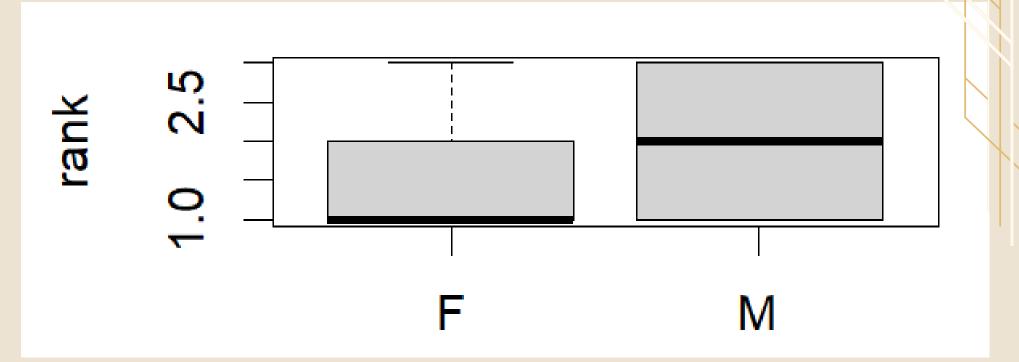
Holding cert and clin constant, the bar graph shows how the proportion of ranks differ across gender for each department

Higher proportion of females being assistant professors compared to males (larger yellow area for females)

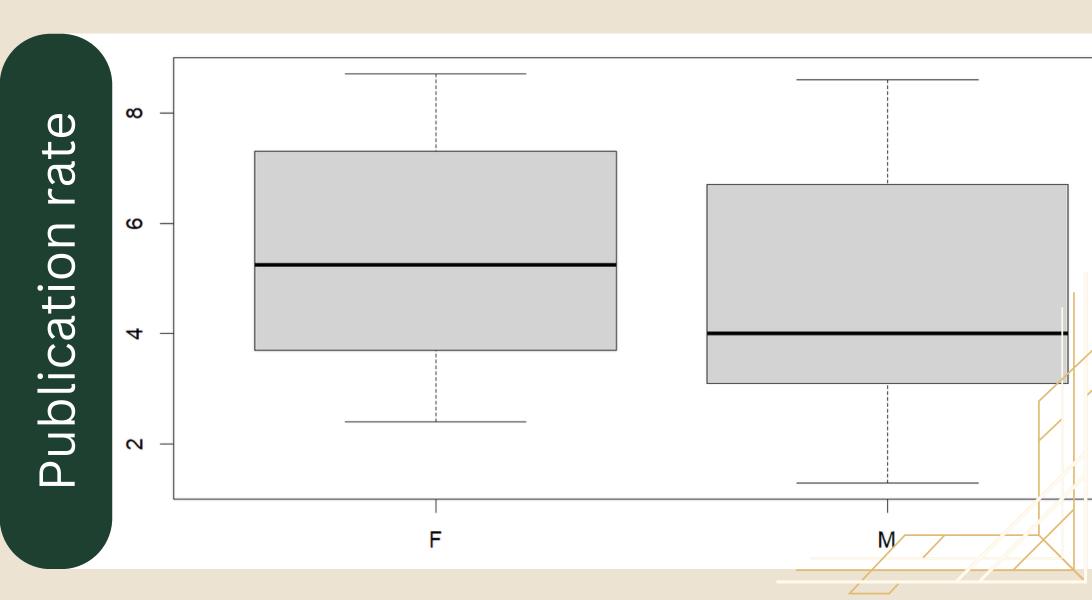
Higher proportion of males being full professors compared to females (larger pink area for males)

#### **ZHONG MING**

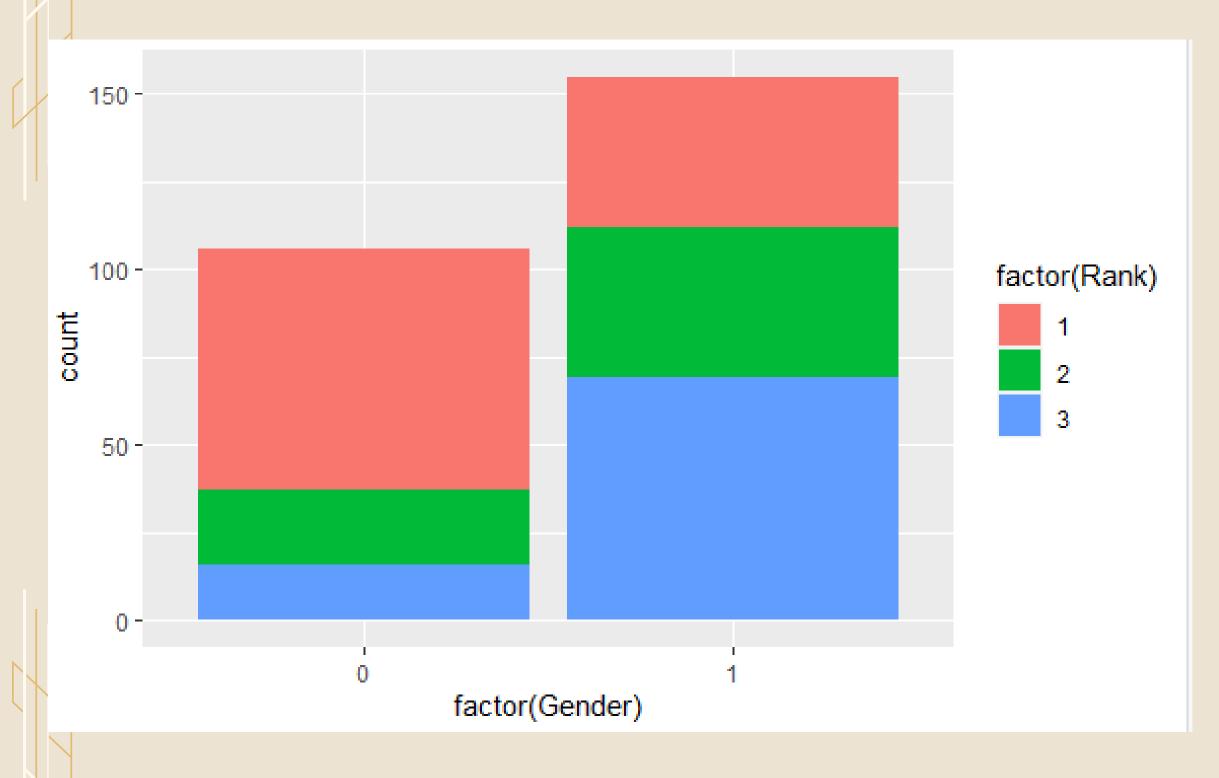
Rank and publication



More publication should lead to higher rank, graph don't match results.



## **INEQUITABLE OPPORTUNITIES FOR WOMEN**



In this graph where gender

O= Female and 1= Male, and

ranks as 1=Assistant, 2=

Associate, 3= Full professor

It is very evident that women are given much lower ranks majority as assistant and very few as associate or full professor in comparison to the males where majority are full professors.

Such discrimination must be taken into action by the authorities.

## CONCLUSION

#### BASED ON THE RESULTS FROM THE VARIOUS GRAPHS WE NOTICE THAT:-

- FEMALE EMPLOYEES ACROSS ALL 6 DEPARTMENTS OF THE HOSPITAL ON AVERAGE, EARN LESS THAN MALE DOCTORS IN EACH DEPARTMENT.
- THERE ARE ONLY 21 FEMALE ASSOCIATE PROFESSORS AND 16 FEMALE FULL PROFESSORS, WHILE THERE ARE 43 MALE ASSOCIATE PROFESSORS AND 69 PROFESSORS.
- THE SALARY AND INCREMENT OF FEMALE PROFESSORS IS MUCH LESS AS COMPARED TO THAT OF MALE PROFESSORS AS SEEN IN THE YEAR 1994.
- Our studies have revealed concerning pattern of discrimination in promotions and salary setting.
- Data analysis and RStudio visualizations demonstrated gender disparities.
- Visualizations provided quantifiable evidence supporting plaintiffs' claims.
- Impact: Directly affected career progression and earnings of female doctors.
- Objective data representations emphasized urgent need for corrective action

Sareen Yogya Hridey

### References

- 1. Lawsuit.csv Dataset
- 2. Lawsuit Document
- 3. Special Session Document
- 4. datavizpyr. "How to Color Boxplots by a Variable in R With Ggplot2? Data Viz With Python and R." Data Viz With Python and R, 24 Jan. 2020, datavizpyr.com/color-boxplots-by-a-variable-in-r-with-ggplot2.