

# Equity in academic advancement: findings from an IDSA-sponsored survey of infectious-disease physicians

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## INTRODUCTION

Recent evidence has shown disparities in the rate of advancement to full professorship among women as compared to men faculty in academic infectious diseases (ID)

We sought to identify barriers to academic advancement overall and by gender among faculty physicians in this field

## METHODS

- We conducted a web-based survey of academic faculty in ID. The survey was made available to the IDWeek2019 attendees and digitally via email and social media to the IDSA membership at large from 9/18/19 - 11/8/2019
- The survey assessed demographic characteristics and barriers to faculty advancement and achievement, building on prior research
- Survey themes included:
  - faculty promotion track
  - part-time work history
  - sponsorship
  - transparency of promotion process
  - salary support or bridge funding
  - presence of women in positions of leadership
  - common metrics of productivity including publications, grants and clinical trial leadership
- Multivariable Poisson regression models were used to evaluate the association between these factors and full professorship

**Table 1. Poisson regression analysis of factors associated with full professorship**

Covariate	Unadjusted RR + 95% CI	p-value	Adjusted RR + 95% CI	p-value
<b>Gender</b>				
Male	REF		REF	
Female	0.54 (0.41 - 0.69)	<0.001	0.75 (0.58 - 0.98)	0.038
<b>NIH Grants</b>				
0	REF		REF	
1	0.99 (0.70 - 1.39)	0.963	0.79 (0.54 - 1.15)	0.222
2+	2.68 (2.01 - 3.57)	<0.001	1.41 (0.97 - 2.07)	0.068
<b>Publications</b>				
0-5	REF		REF	
5-15	2.82 (1.55 - 5.16)	0.001	2.58 (1.37 - 4.87)	0.003
15+	9.89 (5.49 - 15.73)	<0.001	7.14 (3.95 - 12.93)	<0.001
<b>PI - Clinical Trials</b>				
0	REF		REF	
1	0.91 (0.53 - 1.53)	0.727	0.73 (0.42 - 1.26)	0.257
2+	2.64 (1.98 - 3.52)	<0.001	1.58 (1.16 - 2.17)	0.004
<b>Promotion Track</b>				
Clinician	REF		REF	
Scientist	2.05 (1.31 - 3.22)	0.002	0.91 (0.54 - 1.54)	0.737
Clinician-Educator	1.39 (0.87 - 2.24)	0.171	1.34 (0.82 - 2.21)	0.244
<b>Other</b>				
Part-Time (any)	1.24 (0.89 - 1.72)	0.201	---	
Sponsorship	1.44 (1.10 - 1.86)	0.006	1.26 (0.95 - 1.66)	0.104
Promotion	2.14 (1.58 - 2.90)	<0.001	1.35 (0.98 - 1.87)	0.070
Salary Support	0.97 (0.74 - 1.26)	0.816	---	
Woman Leader	0.94 (0.72 - 1.21)	0.626	---	

## RESULTS

- Of 1,036 respondents, 790 were retained in the final dataset [Men: 322 (40.7%), Women: 458 (58.0%), Other: 10 (1.3%)]. 352 respondents were Instructors or Assistant Professors (38.5%), 198 were Associate Professors (25.1%) and 240 were Full Professors (30.4%)
- Fewer women reported that their promotion process was transparent (57.4% v. 67.6%, p=0.004) and more women Full Professors felt they had been “sponsored” compared to men at their same rank (73.3% v. 53.6%, p=0.002)
- In regression analyses (Table 1), gender, publications and clinical trial leadership were significantly associated with full professor rank and promotion transparency and NIH grants emerged as possible correlates of this outcome
- Salary support, part-time work, women in leadership, faculty promotion track and sponsorship were not associated with this outcome

## CONCLUSIONS

Sponsorship and transparency of promotion criteria differed by gender and emerged as potentially important factors associated with full professorship in academic ID. Future policies to promote equity in advancement should address these issues.

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