## 2014 AAMC Annual Meeting: "Learn Serve Lead" Poster Session Poster Session Theme: Innovations in Academic Medicine Location: Chicago, IL

**Title of Abstract**: How a 3-tiered intervention impacted academic productivity of women medical faculty: results from the NIH-TAC (*Transforming Academic Culture*) Trial

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**Problem Statement:** Women enter academic medicine at a rate comparable to men, yet gender disparities persist in achieving promotion, tenure, and leadership roles. We present the results of a cluster randomized trial of a three-tiered intervention on the academic productivity of women assistant professors in an academic health center. Innovative Approach: All eligible departments in a school of medicine were randomized into intervention or control groups. The intervention involved three key levels of the institution (women assistant professors, department/division mid-level faculty task forces, and senior leadership). We examined changes in academic productivity after completion of the 2.5 year intervention trial.

Lessons Learned: Academic productivity improved substantially for both intervention and control participants (115/134=86% response rate). Papers accepted for publication increased by 43% and there was a 38% improvement in grants. However, there were no statistically significant differences detected between intervention and control groups for these outcomes. Further examination revealed that the impact of the intervention varied by professional degree and seniority. For women with PhDs, intervention women published more first author manuscripts than control participants over the trial period (RR=1.92,p=0.02, for total first author papers, and RR=2.31, p=0.003 for peer reviewed first author publications). The intervention was also associated with a positive impact on grants for those women who had been an assistant professor for 6+ years (OR=5.06, p=0.04), in contrast to a negative impact on more junior (3-5 years in rank) women (OR=0.15, p=0.05). In addition, level of participation in the intervention was a significant predictor of the extent of improvement. Women with greater participation had significantly better results in the number of publications compared with women who participated less (1.4 to 2.9 times higher).

Significance: This study sets a precedent for designing, implementing and evaluating change initiatives to advance women faculty - and all faculty - in academic medicine. An integrated 3-level approach involving women assistant professors, senior leadership and faculty task forces was feasible and was successful in subgroups of intervention women faculty. The improvement noted within the control group may have resulted from the high profile nature of this initiative as well as other institutional changes that occurred during the timeframe of the trial. The outcome measures were assessed at two months post-intervention which was too short a time to fully assess the impact of an intervention on academic productivity. Further follow-up is essential. Finally, the results indicate that a rigorous research design, including multiple assessments and control group comparisons, is extremely important in evaluating the effectiveness of interventions on women's careers in academic medicine.

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