Background
Underrepresentation of female engineering faculty persists across the country despite decades of attention and effort, and change is predicted to remain slow well into the future. Moreover, the numbers of female faculty remain disproportionate to the numbers of women receiving PhDs, and those numbers are even lower for the subset of women of color. A large body of literature has identified numerous challenges for female faculty members, including lack of professional development and mentoring, both unconscious and overt biases, gendered socialization, and work-family balance.

Purpose
Given that underrepresentation persists despite the large amount of time, energy and money spent on increasing the numbers of female engineering faculty, we suggest, as other recent work has, that new theoretical perspectives are needed to better understand the challenge. Specifically, we suggest that Foucauldian notions of power, which are currently under-engaged in the engineering education literature, could advance research on underrepresentation and challenges faced by female faculty. Researchers should conceptualize power not as something held and imposed by others, but rather as operating through social norms, beliefs, and discourses.

Methods
Data came from semi-structured interviews with 29 faculty members in science, engineering, technology and agricultural fields at a large research university in the US. Interviewees represented all career levels and a range of different racial and ethnic groups. Data were specifically coded for instance of Foucauldian power after prior analyses highlighted its relevance.

Results
Our interviews revealed the operation of gendered forms of power in the Foucauldian sense wherein power is manifested through subtle societal expectations and our own thoughts and actions. We saw this in how gender role expectations placed on women as caregivers were internalized and shaped women’s actions and choices. We also saw it in the fears and stigmas associated with having children as a female faculty member, including around the significant issue of tenure decisions. Secondly, our interviews highlighted the importance of examining how power operates through faculty discourses. Specifically, we observed discourses of choice and fairness that warrant deconstruction.

Conclusions
Our interviews revealed several important ways in which drawing on Foucault provides insights about the challenges faced by female faculty members. Foucauldian power is an under-engaged yet valuable theoretical construct that could offer useful insights and potentially advance research on women in engineering.

Implications for Practice
- Administrators need to conduct research on the nuances of if and how their policies are used and by whom.
- Faculty member discourses, climate surveys, and assessment data should not be taken at face value. Social scientists can be employed to conduct second order analyses with attention critical gender theory to provide deeper insight into faculty careers.