**Abstract**

Collaboration is a cornerstone of academic progress, particularly in the field of agricultural education and communication. This study addresses the problem of understanding and enhancing collaborative efforts among faculty members within the University of Florida's Agricultural Education and Communication (AEC) department. The primary objective was to analyze the co-authorship networks from 2019 to 2023 to identify patterns and opportunities for strengthening research partnerships.

The significance of this work lies in its potential to enhance faculty collaboration and improve the department's research output and impact. By utilizing social network analysis (SNA), this study provides a framework for examining the relationships and social connections within the AEC faculty network. The methods involved collecting data on peer-reviewed journal articles authored by AEC faculty, organizing this data into structured matrices, and analyzing it using UCINET to evaluate collaboration patterns over time.

The findings reveal notable fluctuations in the number of nodes, ties, average degree, and centralization, with significant statistics in 2019 due to multiple grant projects and a decline in 2022 likely due to the publishing delays caused by the COVID-19 pandemic. These results highlight the dynamic nature of the faculty's social network and the resilience of their collaborative efforts.

The implications of these findings suggest that strategic interventions, such as encouraging interdisciplinary research and expanding connections beyond the university, could further enhance the department's collaborative network. This study underscores the importance of understanding and leveraging social networks to foster innovation and knowledge sharing in academic settings.