Dear New York State Association of Nurse Anesthesia,

I am reaching out to express my gratitude for your pivotal role in the dissemination of my survey for my doctoral nursing project. The contribution from your members has played a key role in my research, providing valuable data which helped to inform and shape the findings of this study.

## **Project Summary:**

This project represents a comprehensive study into the utilization of Point-of-Care Ultrasound (POCUS) by Certified Registered Nurse Anesthetists (CRNAs) with the aim of elevating the standard of care in anesthesia. Through a detailed literature review and a cross-sectional survey, the study assessed CRNAs' confidence and capability in using POCUS, identified existing barriers to its widespread adoption, and suggested potential enablers that could facilitate its integration into clinical practice.

The study was comprised of a literature review that provided a glimpse of the most up to date evidence supporting the efficacy of POCUS for gastric content assessments in anesthesia. The literature also highlighted an extensive gap in the standardized training and consistent use of POCUS among anesthesia providers. Following the review, a survey was conducted which gathered responses from twenty-eight practicing CRNAs. This survey revealed their levels of confidence in using POCUS and their perceptions of its relevance and barriers and enablers to its utilization in clinical practice.

## **Key Findings:**

The results from his survey offer invaluable information regarding demographics, confidence levels and perceived barriers and enablers which helped to highlight key trends and insights that affect POCUS proficiency and utilization. A significant portion of CRNAs reported lacking confidence in their ability to use POCUS, with 78% of respondents not at all confident in utilizing this technology. The most cited barriers were a lack of training opportunities and resistance from colleagues or superiors. Despite these barriers, there was a strong acknowledgment of the importance of ongoing POCUS training, with all respondents stating that ongoing POCUS training is either moderately or very important.

## **Future Research and Recommendations:**

Recommendations for future actions include the development of continuing education course specifically tailored for CRNAs, and the creation of a standardized curriculum for CRNA schools focused on POCUS which includes both technical skills and clinical applications. By implementing these recommendations, the field of nurse anesthesia could significantly increase the utilization of POCUS for gastric content assessments, ultimately leading to greater patient safety.

Future research could focus on evaluating and apprising the effectiveness of educational interventions aimed at enhancing CRNAs utilization of POCUS. By using our study as a baseline for CRNAs confidence and capabilities in POCUS, longitudinal studies could track the evolution of POCUS adoption and the varying levels of confidence overtime, helping to determine the effectiveness of said educational interventions.