

Longitudinal assessment of affect, behavior, and cognition in children undergoing general anesthesia

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Over 3 million children undergo surgery each year in the United States. Surgery may be associated not only with short-term behavioral changes, but with long-term alterations in cognition and behavior. My long term goal is to improve both the short- and long-term health and well-being of children after anesthesia. I have formulated a conceptual framework of how procedures requiring anesthesia affect child health. The objective of this project is to perform longitudinal assessments of young children undergoing procedures requiring general anesthesia and develop the crucial preliminary data to permit a future larger cohort study to evaluate my proposed framework. At the conclusion of this work I will have the experience, tools, and preliminary data necessary to lead a larger cohort study examining mediators and moderators of perioperative changes in affect, behavior, and cognition. These data will be key to optimizing postoperative child health and well-being and designing interventions if indicated.