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**Research Area:** Risk factors associated with post-operative venous thromboembolism in spinal

surgery in a community-based practice

Mentor: L. Gerard Toussaint III, MD

Preston Adhikari and Sharon Pan students from the Class 2024 at the Texas A&M School of Medicine, are co-designing a clinical research project investigating risk factors associated with post-operative venous thromboembolism in spinal surgery under the guidance of L. Gerard Toussaint III, M.D., a licensed neurosurgeon at The Texas Brain and Spine Institute. Although venous thromboembolism (VTE) is a rare postoperative complication after spinal surgery, the fatality rate of pulmonary embolism, combined with the morbidity in patients who survive, make this severe adverse event a troubling concern of many spine surgeons. Predicting, in a community setting, those patients who are at highest risk would allow judicious pre-operative screening and a standardized approach to control for the postoperative VTE risk. Conclusions drawn from this study will alter clinical practice – those patients with risk factors we identify will be considered for pre-operative lower extremity ultrasounds, and more aggressive postoperative mitigation strategies. In addition, these identified patients could be a cohort to enroll in a prospective trial of a new management paradigm.