## A Single-Handed Approach to Adhesive Bandage Strip Application for Enhanced Sterility and Convenience

Sarinana, Adriana (School: Van Horn High School)

Coping with an abrasion or cut poses the challenge of not just averting bleeding but also managing blood contact while searching for and opening adhesive bandages strips like Band-Aids®. The task of separating the two sides of an adhesive bandage strip's sleeve can be needlessly complex, particularly when time is crucial to halt the bleed and—when inevitably—only one hand is available. An additional concern involves the adhesive bandage strip's adhesive side, where handling it with just one hand proves difficult in preserving the bandage strip's sterility and guarding against potential contamination from external microorganisms. In this project, a novel delivery tool for adhesive bandages strips, such as Band-Aids®, was conceived and developed to administer adhesive bandage strips with only one hand, ensuring sterility and introducing a new bulk packaging system. This revolutionary design not only simplifies the process for parents in bandaging their children but also aids healthcare workers in applying bandages without direct contact with patients' skin or the risk of the bandage's adhesive pulling at their gloves.