# Robotic Cannula System for Minimally Invasive Surgical Tools

**Automates surgical tool movement within cannulas, reducing surgeon burden and error.**

Researches at Purdue University have developed a robotic cannula system that can be easily integrated and deployed with existing technology already in use. This new system removes the need for human interaction once it is in place. This robotic system will improve the efficiency of the surgical tool use. The robotic cannula system allows the tools to be used together, coupling all of their back and forth movement. This will free up some of the responsibility of the doctors performing surgery and let them focus on the more important aspects.

**Advantages**:

-Improves efficiency of surgical tool use

-Decreases possibility of human error

-Decreased responsibility during surgery

Potential Applications:

-Surgery

-Robotics

**TRL:**

**Intellectual Property:**

Utility Patent, 2019-12-16, United States

**Keywords:** Mechanical Engineering, Medical Devices, Medical/Health, Robotics, Surgical Tools

**Technology ID**

2020-CAPP-68748

**Category**

Robotics & Automation/Automation & Control

Digital Health & Medtech/Assistive Robotics & Accessibility Systems

**Authors**

David John Cappelleri

Yang Ding

Benjamin Johnson

**Further information**

Patrick Finnerty

pwfinnerty@prf.org

**View online**