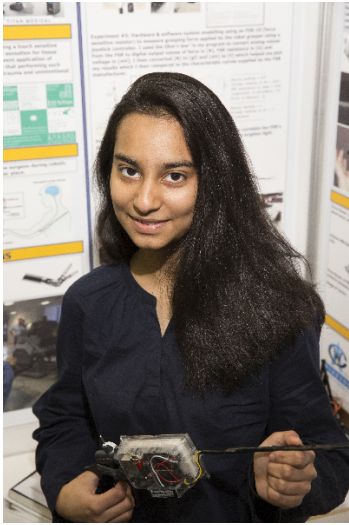


# CWSF 2019 - Fredericton, New Brunswick



## Arsala Basit

### Robotic Surgery

**Challenge:** Innovation

**Category:** Junior

**Region:** Windsor

**City:** Windsor, ON

**School:** An-Noor Private

**Abstract:** I developed and tested three prototypes to incorporate haptic feedback in RAMIS-type surgical techniques. I used audio-visual cues, such as a buzzer alarm and a red LED light, to differentiate between hard and soft pinches. No present-day robotic surgical system provides kinesthetic force and tactile information to the surgeon.

### Biography

My name is Arsala Basit. I was born in Lahore, Pakistan and came to Windsor, Canada in July 2014. I am an ambitious young scientist with the goal to invent advanced medical devices that revolutionize modern day surgery. My teachers and peers along with local hospitals and my parents have supported me through out my journey. My hobbies include playing soccer and basketball. I plan to work very hard and become an orthopedic surgeon and serve humanity for the rest of my life. This opportunity to represent Windsor, ON at the CWSF has increased my confidence to fulfill my dreams. This opportunity has given me the hope to dream big and revolutionize this world. My dad always tells me that "It's difficult to climb up a hill, but the view is from the top" and now I realize that he was right all this time. My huge inspiration for this project came from my grandmother when she fell sick due to surgical site infections after her humeral nail implant. I plan to further deep dive into the field of surgical robotics to begin designing my own instruments. Thanks,  
Arsala Basit

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