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## Advanced Prototype for an Automated Version of the Robotic IV Pole

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# Department of Biomedical Engineering

## Advanced Prototype for an Automated Version of the Robotic IV Pole

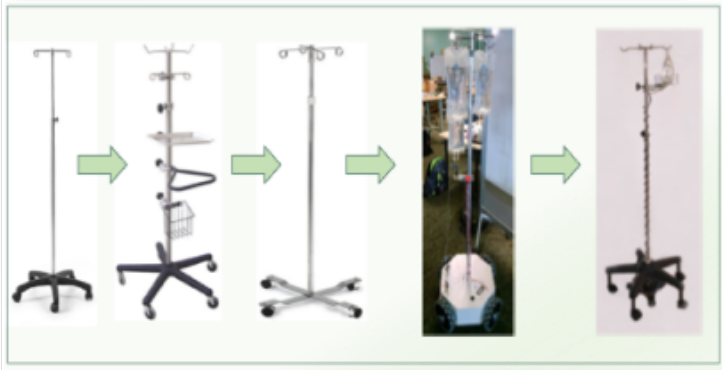
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Dr. Amira Zaylaa

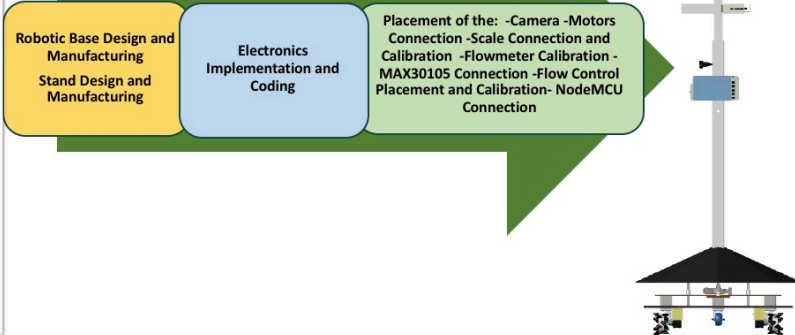


### Introduction

Intravenous (IV) poles are devices used to provide care and deliver medications to patients. IV poles are used on a daily basis in different departments in hospitals. IV pole types are: Commercial and Robotic.



### Methodology and Robotic IV Pole Prototype



### Problem Statements

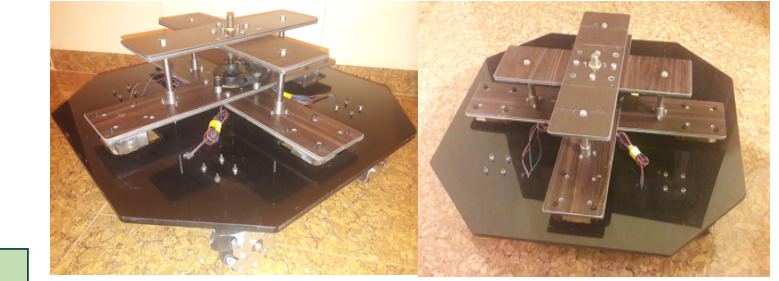
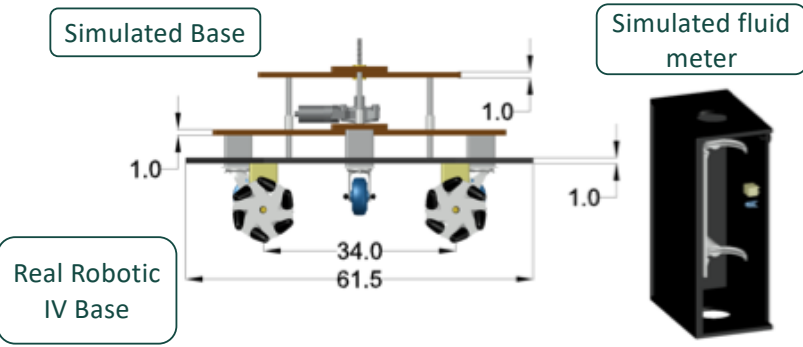
The existing commercial IV poles impose a constraint on the patient's motion while dragging the pole.

Consume the nurses' time while helping the patient, or while checking the the IV bag, and might give inaccurate measurements

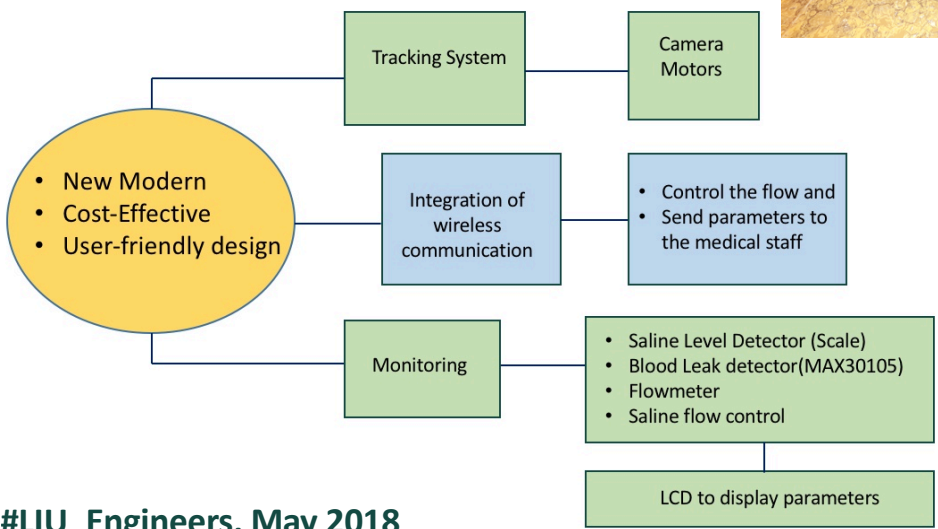
The existing Robotic IV poles lack the monitoring of different parameters related to the IV bag status

Robotic IV poles are not fully automated

### Prototype Simulation and Experimental Results



### Objectives



### Conclusion

