# A Device for the Controlled Reduction of Intussusception in Children

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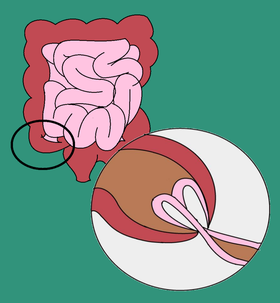
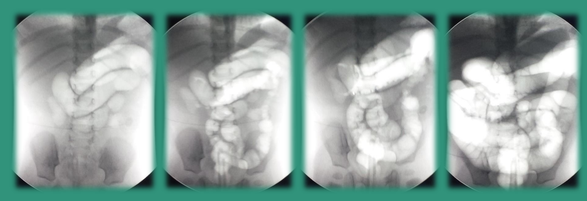
## Problem Statement



**Intussusception:** The telescoping of the bowel over itself that can lead to ischemia, tissue death, perforation, peritonitis and possibly death

**1** in every **2,000** infants in the US will suffer from this **life threatening condition**

**Pneumatic reduction:** The use of air to generate pressure & push out obstruction



## Current Methods

Enema Tip

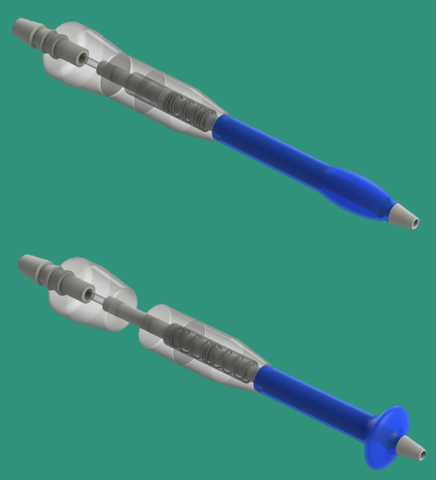
Plastic Tubing Connector

Hand Pump

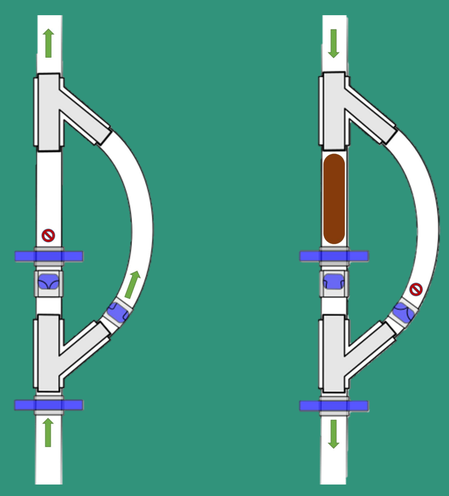
## Challenges

1. Air leakage
2. Fluid backflow
3. Unstable pressure
4. User fatigue

## Our Solutions



1. Improved enema tip



2. Fecal filtration system


3. Automated pressure generation unit

4. Handheld controller

Our team would like to acknowledge Dr. Grattan-Smith for his mentorship, the BME capstone team for their guidance, and ACTSI and the GT/Emory Department of Biomedical Engineering for funding.