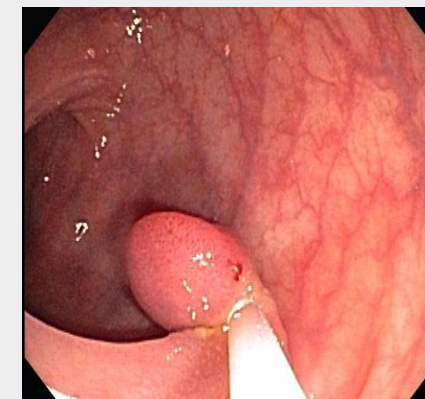


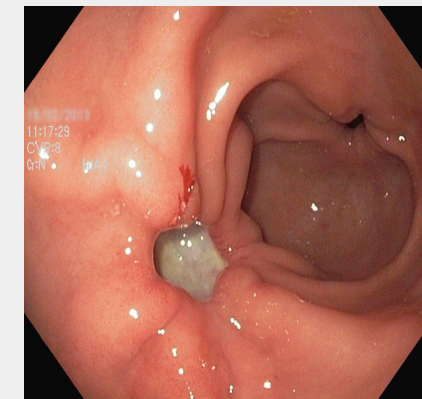
Background/Unmet Needs

- High-fidelity
- Ease of use
- Affordability
- Cost-effectiveness
- Interchangeable pathology
- Electrocauterization compatible
- Sustainable model

Pathology



Colon Polyp



Gastric Ulcer



Surgical Simulations

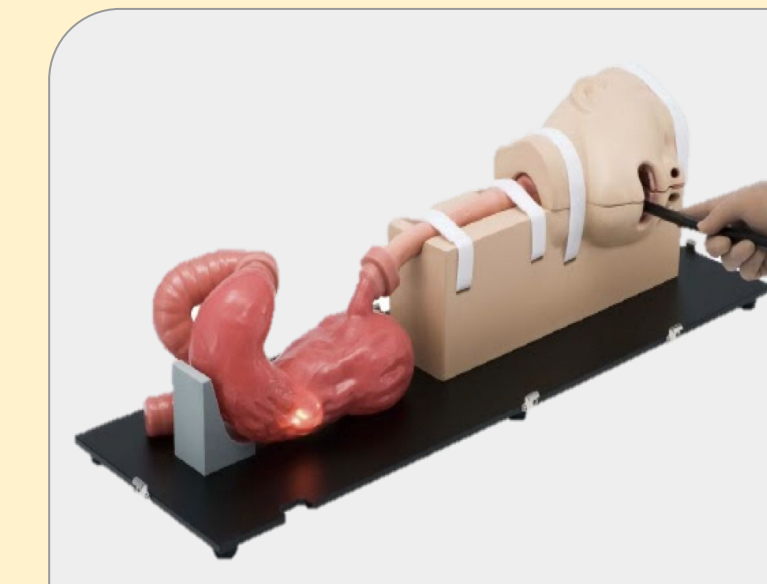


Salim Siraj, Sam Bragen, Chen-Hao (Henry) Hsu, Alexandro Lopez Magaña
Masters of Translational Medicine
 University of California, Berkeley and San Francisco

Current Technology



EndoSim
 (~\$3,000)

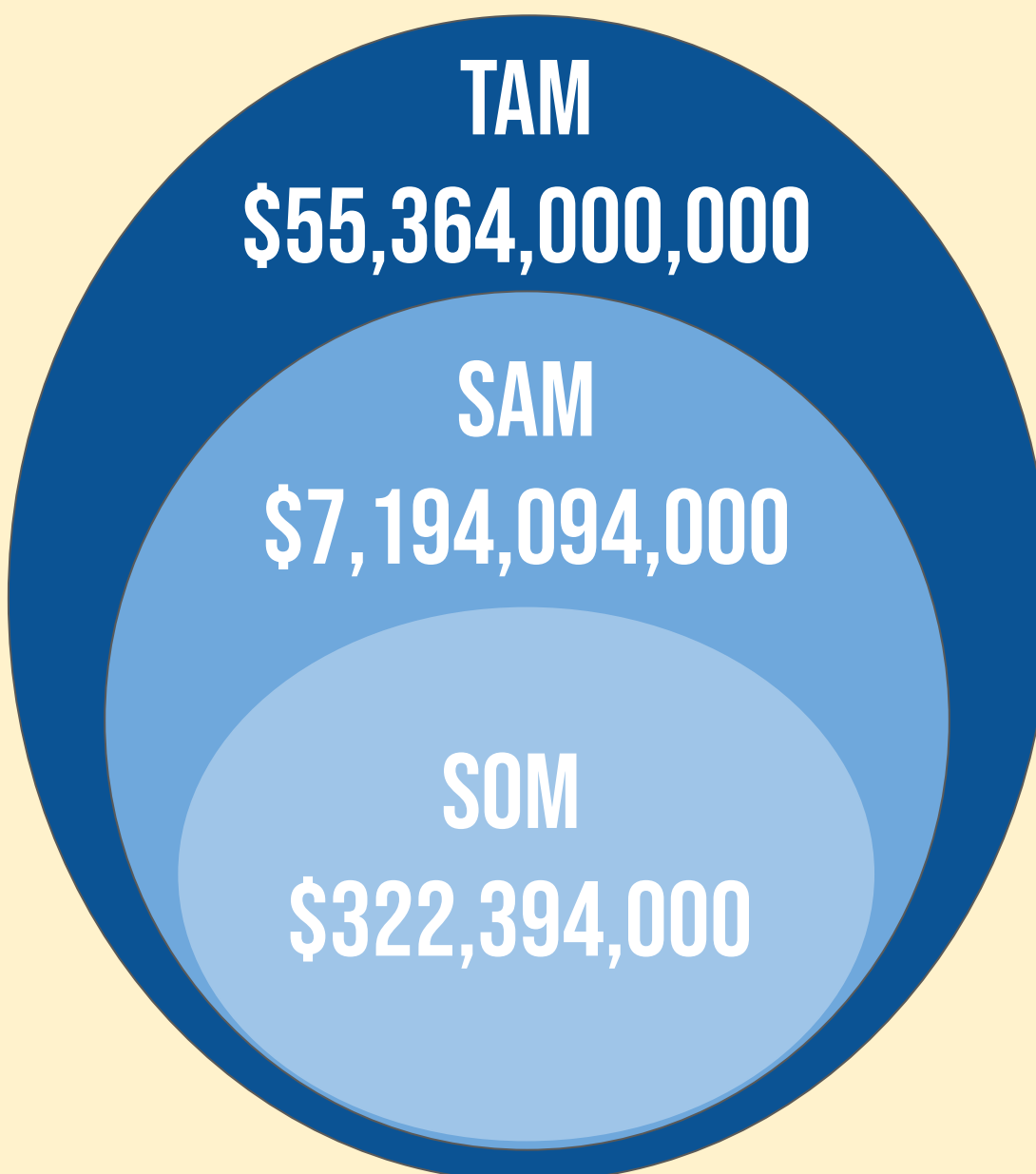


KOKEN
 (\$5,300)



Simbionix VR
 (~\$10,000)

Market Estimation



TAM (Total Addressable Market)

Worldwide
 - Medical Device Companies, Doctors & Nurses, and Teaching Hospitals

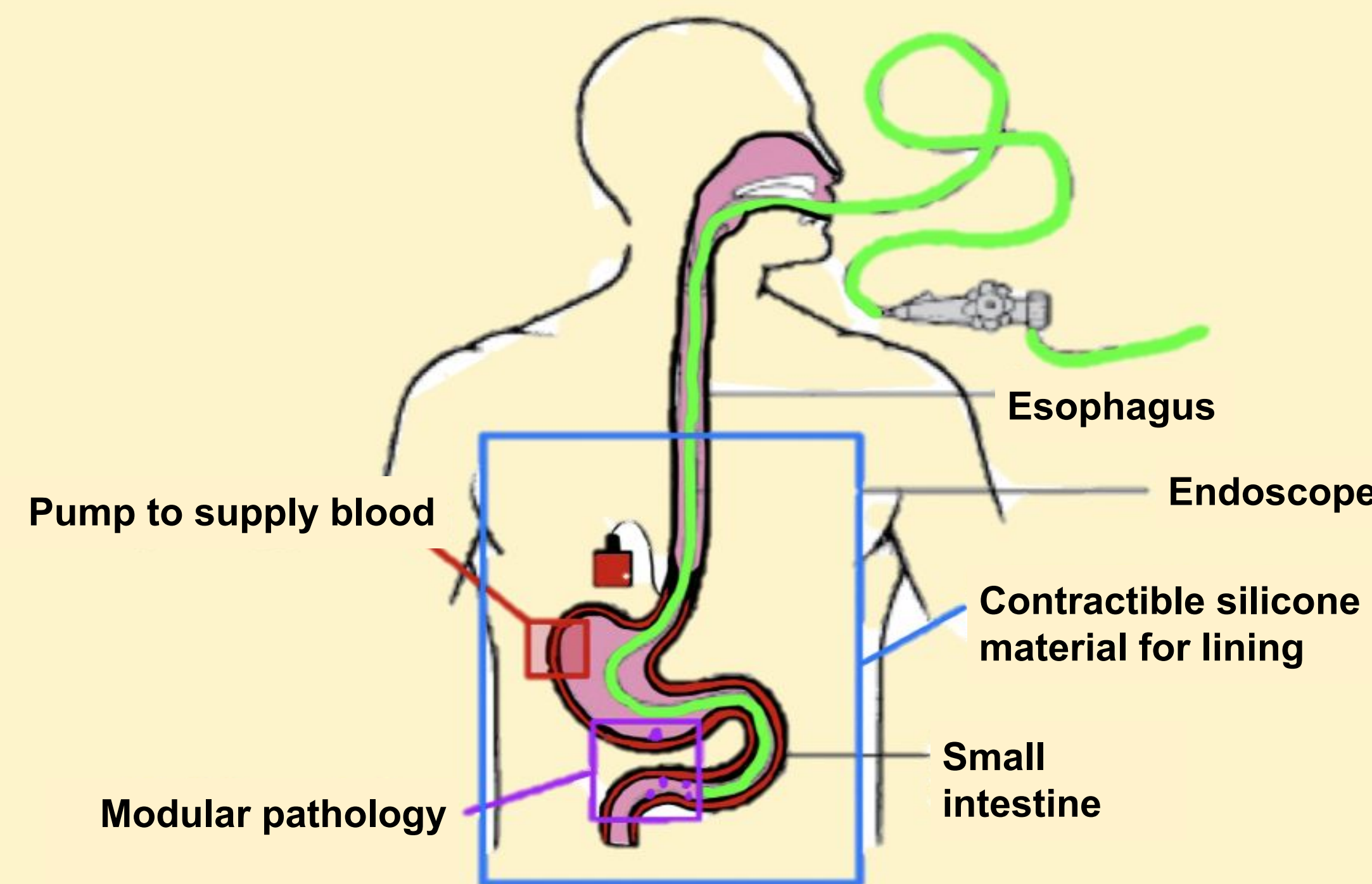
SAM (Serviceable Addressable Market)

United States
 - Medical Device Companies, PAs & Nurses, Doctors, Teaching Hospitals

SOM (Serviceable Obtainable Market)

United States
 - 5% of Medical Device Companies, Surgeons, PAs, OR Nurses, and Medical Schools

Proposed Idea



Value Proposition

Surgical Simulations will create a sustainable, cost-effective, and realistic model of the human gastrointestinal tract that promotes the continued education of medical professionals of all backgrounds and experience levels by addressing the limitations of current training methods identified by current experts in all sectors of the medical and 3D print/design fields

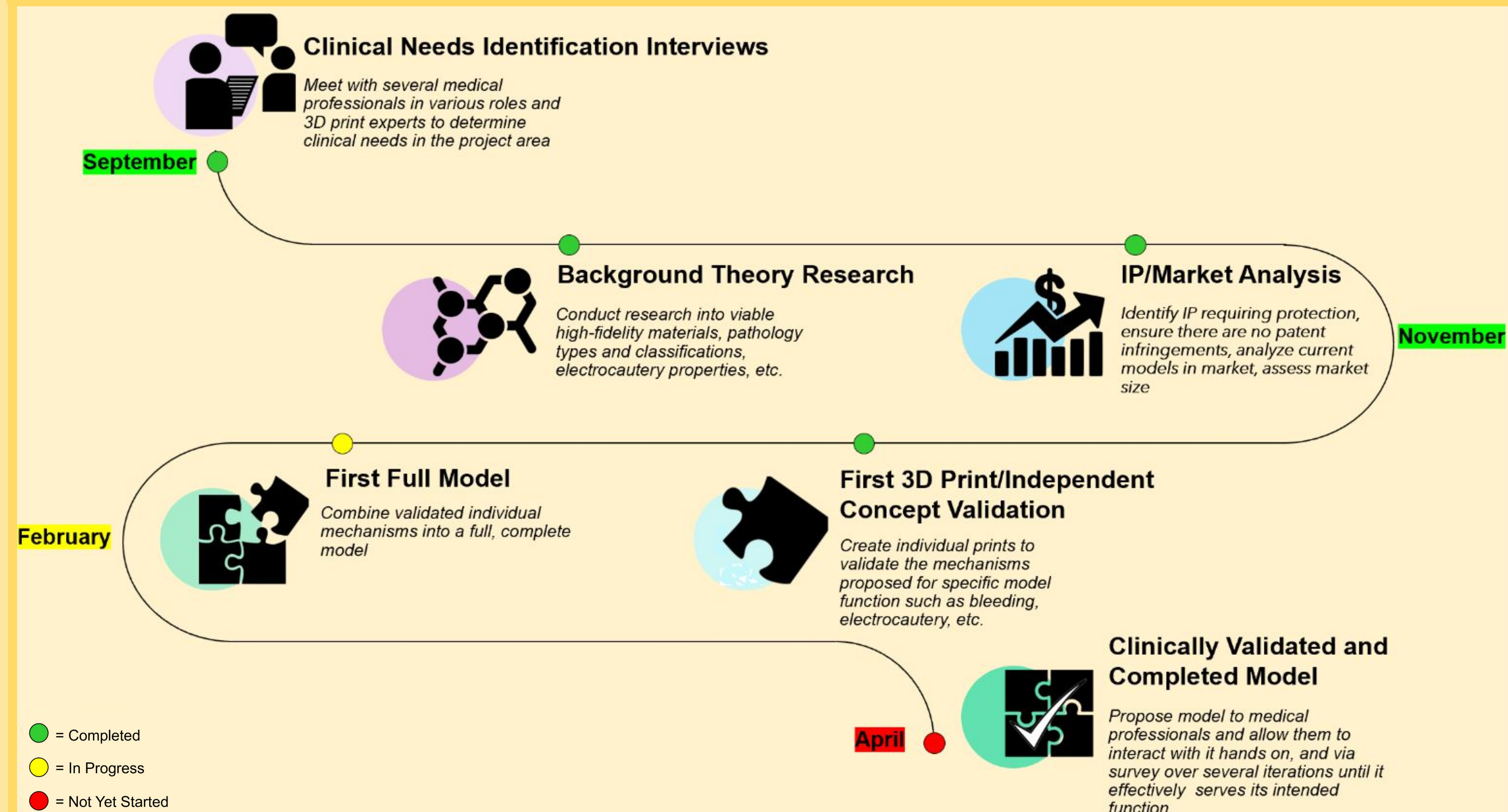
Unique Validation Plan

Continuous feedback from current GI doctors, 3D print experts surgeons, medical professionals, and students allows for needs-based prototype iteration and evaluation by area experts

Competitor Analysis

	Endosim EASIE - R4	Koken EGD/Colonoscopy Lower GI Simulator	Chamberlain Group Endoscopic Upper/Lower GI Trainer	Kyoto Kagaku Colonoscope Training Simulator	MTM Endoscopic Surgical Simulator
Upper GI Endoscopy	✓	✓	✓	✗	✓
Lower GI Endoscopy	✗	✓	✓	✓	✓
GI Bleeding	✓	✓	✗	✗	✓
Polypectomy/ Biopsy	✓	✓	✗	✗	✓
Force Feedback	✓	✓	✓	✗	✓
Intestinal Looping	✗	✗	✗	✓	✓
Electrocauterization	✗	✗	✗	✗	✓
Collapsibility/ Expansion	✗	✗	✗	✗	✓

Past and Future Work



Advisors

PrinterPrezz staff: Alexis Dang, MD, Alan Dang, MD, Chris Dang, Eric Lam, VA GI physicians: Roy Soetikno, MD, Tonya Kallenbach, MD, MTM program director: Michael O'Donnell