Preclinical Phase

PGY 1:

Orientation/ Introduction to Robotics Curriculum:
- Online modules
  - Introductory modules via Intuitive Learning
- Hands on in-service
  - In person orientation by Intuitive Reps (docking, instrument exchange, orientation to simulator etc)

PGY 2:

2nd year resident must finish all the VA simulation modules and the dry lab by the end of the VA rotation.

Basic Simulation Training:
- Virtual Reality Simulation (must achieve 85%)

<table>
<thead>
<tr>
<th>VA SIMULATOR</th>
<th>NEW SIM NOW (at NMH Feinberg 6)</th>
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<tbody>
<tr>
<td>- Camera targeting-Level 2</td>
<td>- Camera Control Combo Exercise</td>
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<tr>
<td>- Energy dissection-level 1</td>
<td>- FRS 4th Arm Clutching</td>
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<tr>
<td>- Energy switching-level 2</td>
<td>- Energy Pedal 2</td>
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<tr>
<td>- Ring and rail-level 2</td>
<td>- Ring Rollercoaster 4</td>
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<td>- Ring walk-level 3</td>
<td>- FRS ring tower transfer</td>
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<tr>
<td>- Suture sponge-level 3</td>
<td>- Anterior needle driving-vertical</td>
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<td>- Thread the rings</td>
<td>- Big Dipper Needle Driving</td>
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<td>- Tubes</td>
<td>- FRS Railroad track</td>
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<td>- FRS Knot tying</td>
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<td></td>
<td>- Procedural – Inguinal Hernia*</td>
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<td></td>
<td>- Anatomy Identification</td>
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<td>- Guided Incision &amp; Dissection</td>
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<td>- Freehand Incision &amp; Dissection</td>
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*Procedural – Inguinal Hernia should be done by the 2nd year resident during a Gen Surg rotation at NMH.

- Dry lab (done at VA)
  The first day of the service at VA, Intuitive rep will meet the residents to go over the system and set up the training simulator. In the second week of VA service, the dry lab will be done under guidance of Dr. Tarbox. Dr. Tarbox will oversee the residents and schedule the dry lab (most likely Thursday after 3pm. Work will be done on box simulator, abdominal model and inguinal hernia model.
  - Peg transfer, Pattern Cut, Endoloop
  - Suturing
  - Extracorporeal & Intracorporeal Knot Tying
  - Anastomosis

- Wet lab (done at NMH)
  - Porcine gall bladder & ventral hernia repair (PGY1-3)
  - Porcine inguinal hernia repair (PGY1-2 & PGY 3-5)
  - Porcine laparoscopic foregut (PGY 3-5)
  - Porcine colorectal (PGY 3-5)
  - Emergency/conversion
o Intuitive wet lab course (2 residents/year)

- **Review Video Library of Cases/ Port Placement** (5 milestones for each case)
  o Gen Surg Cases:
    ▪ Inguinal Hernia
    ▪ Hiatal Hernia
    ▪ Colectomy
    ▪ Ventral Hernia
  o Thoracic Surgery Cases:
    ▪ Lobectomy
    ▪ Segmentectomy
    ▪ Esophagectomy
    ▪ Complex Foregut cases

**PGY 2+**

**Clinical Phase**

- **Bed Side Assisting**
  o 10 bed side assistant requirement demonstrating proficiency in docking, instrument changes
  o Also minimum 20 cases requirement as primary surgeon for the current 4th and 5th years, 30 cases for 3rd years and 40 cases for the current 2nd years as the case requirement for the Industry sponsored (Intuitive) certificate for robot training.

- **Console Surgeon**
  o Type of case
  o Assessment and evaluation using SIMPL system

All the current senior residents and lab residents who are coming back to clinical service as 4th year are advised to do the NEW SIM NOW simulation as a part of refresher course for the robot.