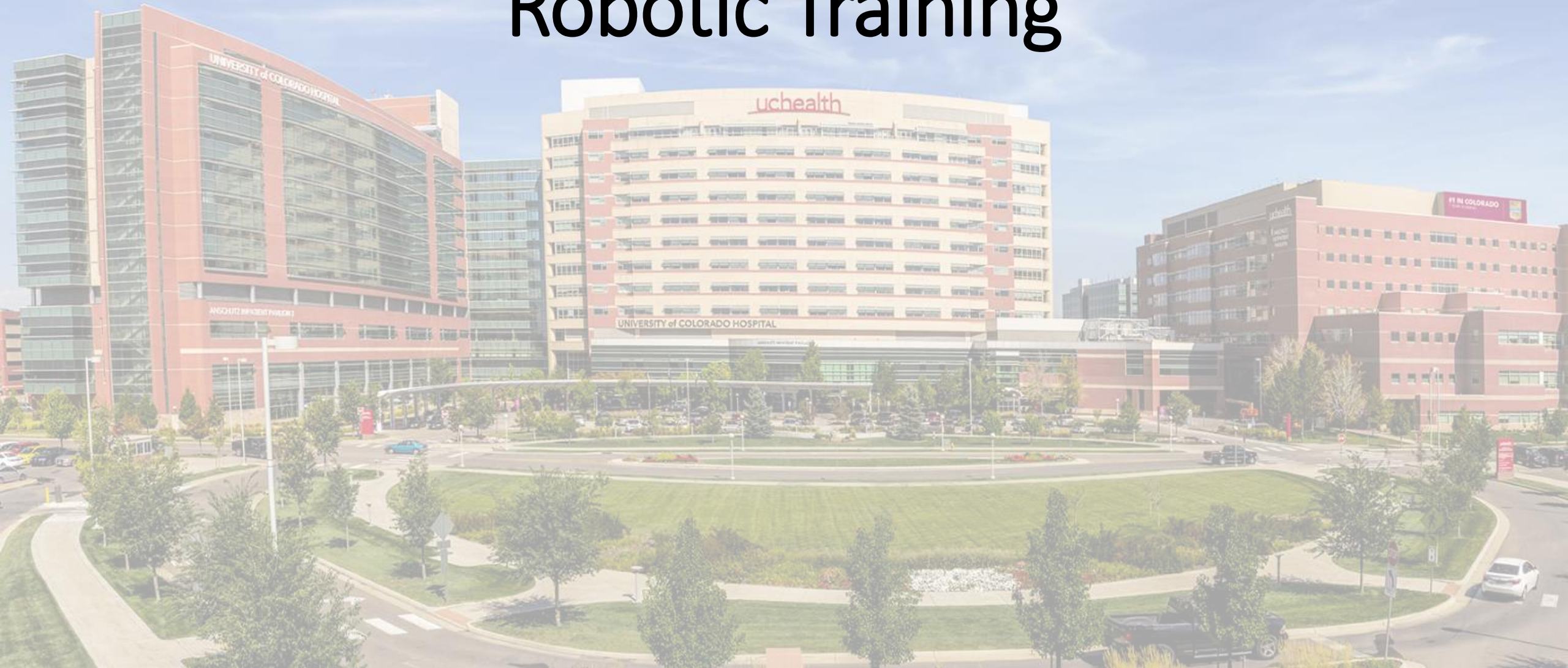


Surgical Education Robotic Training



Robotic Surgery - Certification

- **Training – through residency or fellowship program**
- Practice – through Intuitive HQ
- Experience – case logs, letters from prior employer

Training Equivalency Certificate

1. Online Module Completion Certificate
2. Hands On Orientation
3. SimNow Simulation Modules
4. Case Logs
 - 10 bedside assist
 - 20 console
5. Letter of Attestation from training program

Robotic Surgery - Certification

If you ever want robotic surgical privileges at a hospital, you will need this!



Robotic Surgery - Curriculum

- Orientation
 - CSI hands-on orientation
 - Online modules
- PGY 1-2
 - SimNow training - basic
 - CSI training - basic
 - Bedside assist training
- PGY 3-5
 - SimNow training – expert
 - CSI training - expert
 - Console training
- Rotations
 - Thoracic
 - Platinum (Colorectal)
 - Copper (Bariatric/MIS)
 - White (Surgical Oncology)
 - Green (Surgical Oncology)
 - Colorado Springs
 - VA

SimNow Curriculum by PGY Year

PGY1

1. Sea spikes 1
2. Three arm relay 1
3. Energy Pedals 1
4. Ring roller coaster 1
5. Camera 0
6. Needle pose match

PGY2

1. Sea Spikes 2
2. Energy pedals 2
3. Anterior needle driving – Horizontal
4. Knot tying
5. 30-degree scope swap
6. Wrist Articulation 1

PGY3

1. Sea Spikes game
2. Three Arm Relay 3
3. Anterior Needle Driving – Vertical
4. Clutch
5. Wrist Articulation 2
6. Vessel Energy Dissection

PGY4

1. 4th Arm Cutting
2. Big Dipper Needle Driving
3. Running Suture
4. Around the world needle driving
5. Posterior Needle driving ATW
6. Anterior needle driving ATW

PGY5

1. Railroad Track
2. Ring tower transfer
3. Combo Exercise
4. Puzzle Piece Dissection
5. Instrument Playground

Optional/Research Residents

1. Competitive Needle Posematch 30
2. Competitive Needle Posematch 60
3. Competitive Needle Posematch 90
4. Three Arm relay 2
5. Ring Roller coaster 2
6. Ring Roller Coaster 3
7. Ring Roller Coaster 4
8. Ring Roller Coaster 5

Robotic Surgery

- Intuitive Da Vinci robotic console
 - FDA approved in 2000
 - Most commonly used
 - Consoles present in every major academic center in the US
- Other robotic consoles have been approved
 - Others are on the way



Robotic Surgery - Usage

- Comprises ~15% of all general surgery operations
 - Used by 35% of general surgeons
- Survey of residents from last 5 years
 - 50% of graduates use robotics in their independent practice!
- Most commonly used for
 - Cholecystectomy
 - Colectomy
 - Ventral hernia repair
 - Inguinal hernia repair
 - Reflux surgery
 - Cancer surgery

