

**T\*S\*D\*A  
BOOT CAMP**

**September 11-14, 2014**

**Chapel Hill, NC**







**T\*S\*D\*A  
BOOT CAMP**

**AORTIC ROOT  
ANATOMY**

Sponsored by  
**CryoLife, Inc.**









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BOOT CAMP**

**CPB SKILLS**



GUIDANT

01955

USA PAT. &  
DESIGN OFF.

GUIDANT

01955

01955





## CPB Steps

**Step 1.**  
Heparin

**Step 2.**  
Expose the heart;  
Check BP/aorta

## CPB Steps

**Step 3.**  
Aortic cannulation;  
Check cannula for pressure and flow

**Step 4.**  
Atrial cannulation;  
Venous clamp off;  
On bypass;  
Lungs off

## CPB Steps

**Step 5.**  
Inspect the heart;  
Place aortic and/or retrograde cardioplegia;  
Reduce pump flow/cross-clamp aorta/  
Return to normal flow/check line pressure;  
Begin cardioplegia;  
Set patient temperature

## CPB Steps

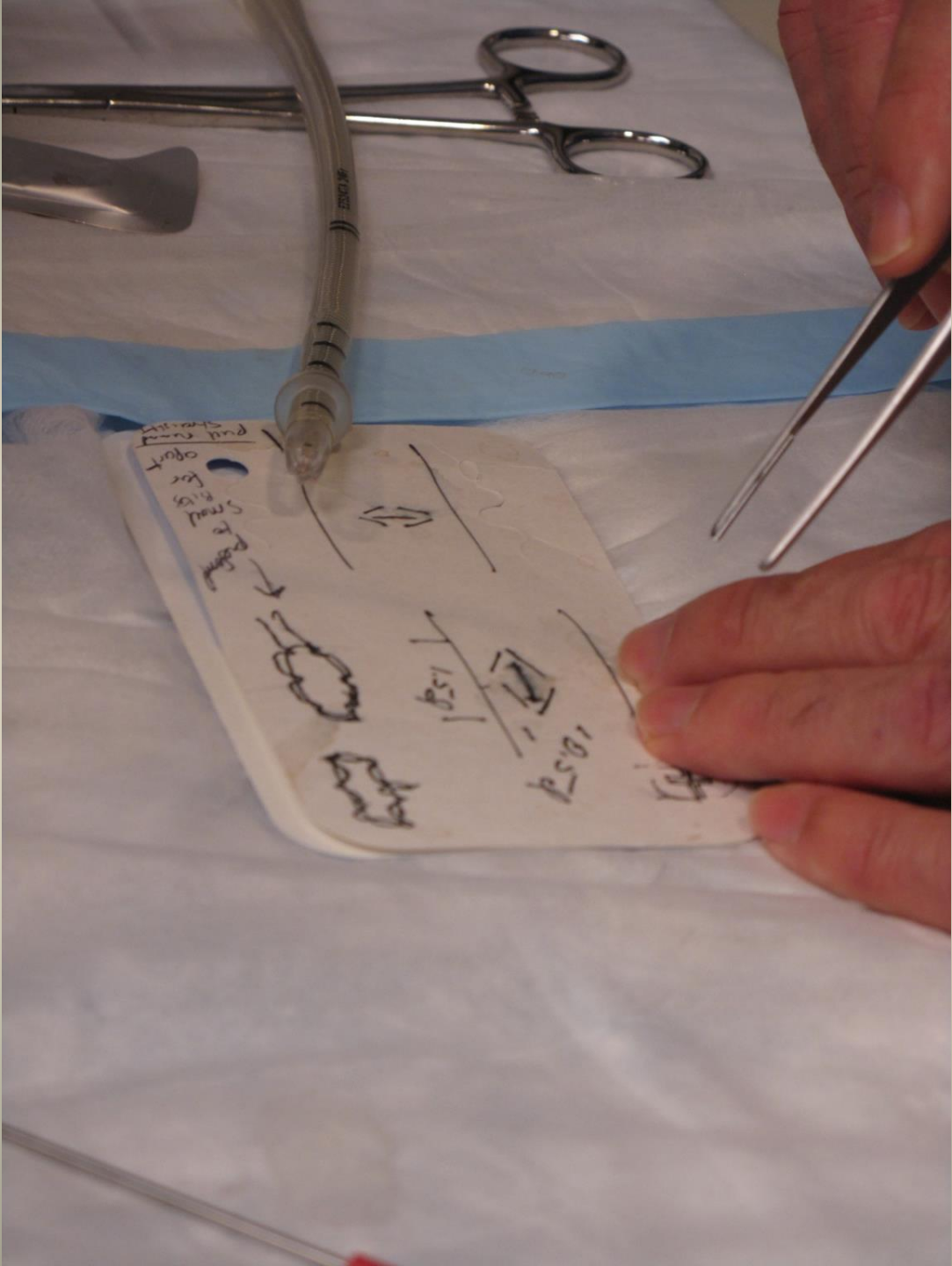
**Step 6.**  
Release aortic cross-clamp after  
warm cardioplegia;  
Be certain six conditions reviewed  
before weaning CPB:  
Lungs inflating and deflating;  
Good contractility;  
Stable heart rhythm;  
No bleeding in inaccessible areas;  
Temperature at desired level;  
No retained air

## CPB Steps

**Step 7.**  
Wean off bypass;  
Venous line clamped/remove when stable;  
Remove aortic vent;  
Protamine;  
Follow RAP, PAP, and BP;  
Be alert for hemodynamic reaction;  
Remove arterial cannula



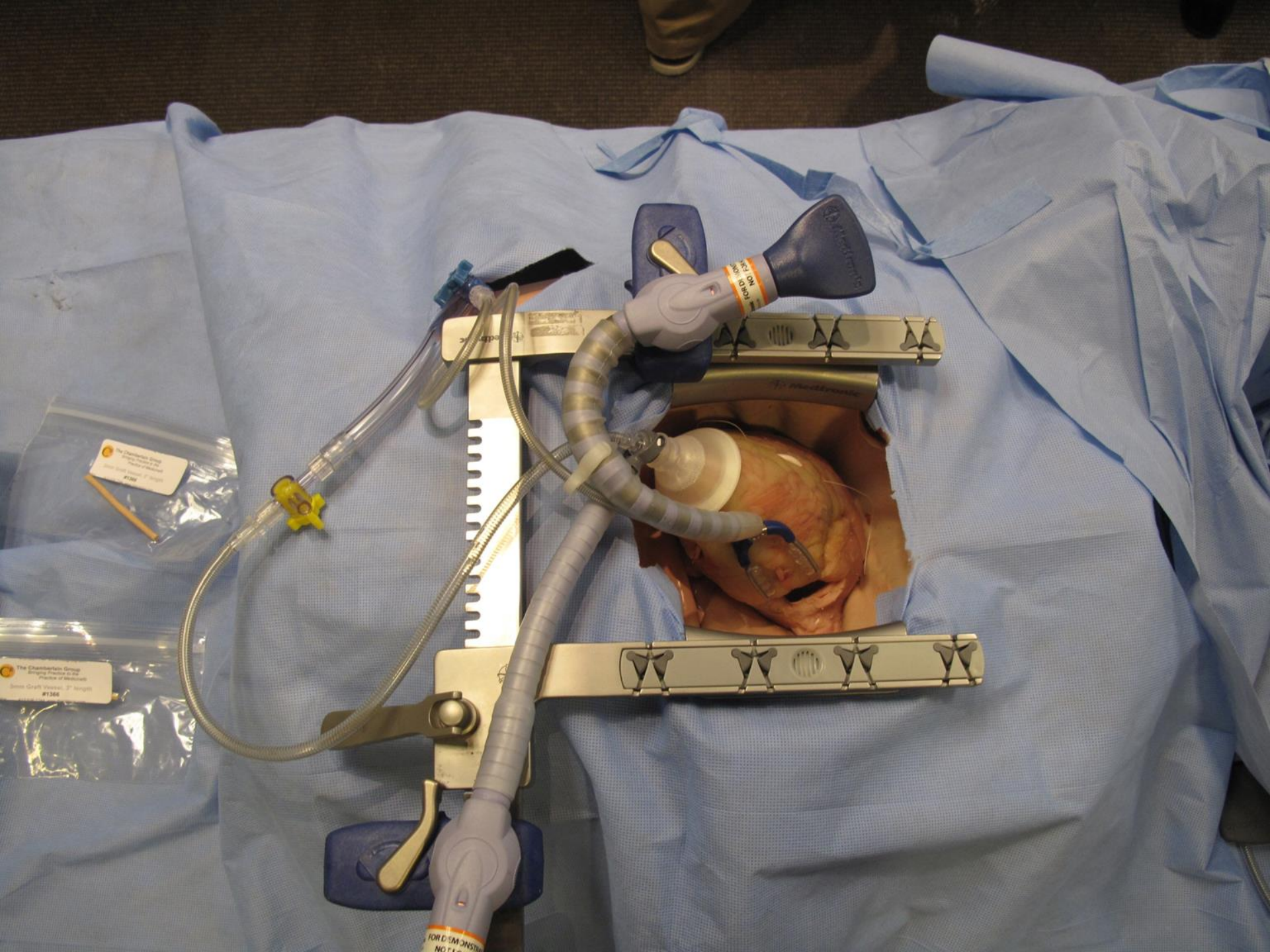








Steps	CPB Steps	CPB Steps	CPB Steps	CPB Steps
Step 3. Aortic cannulation: Check cannula for pressure and flow	Step 4. Aortic cannulation: Remove clamp off, Dr. heparin, Clamp off	Step 5. Insert the heart Place aortic and/or retrograde cardioplegia Reduce pump flow (avoid clamp artery) Return to normal flow (check flow pressure) Begin cardioplegia Set patient temperature	Step 6. Reduce aortic cross clamp after warm cardioplegia Be certain all conditions reviewed before weaning CPB Long inflating and deflating Good cardioplegia Stable heart rhythm No bleeding in inaccessible areas, temperature of distal head No retained air	Step 7. Wean off bypass Remove flow clamped/returne when stable Remove aortic cross Protamine Follow K&E P&T and BP Be alert for hemodynamic reactions Remove aortic cannula



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MARK BEARSS  
MEDTRONIC EDUCATION

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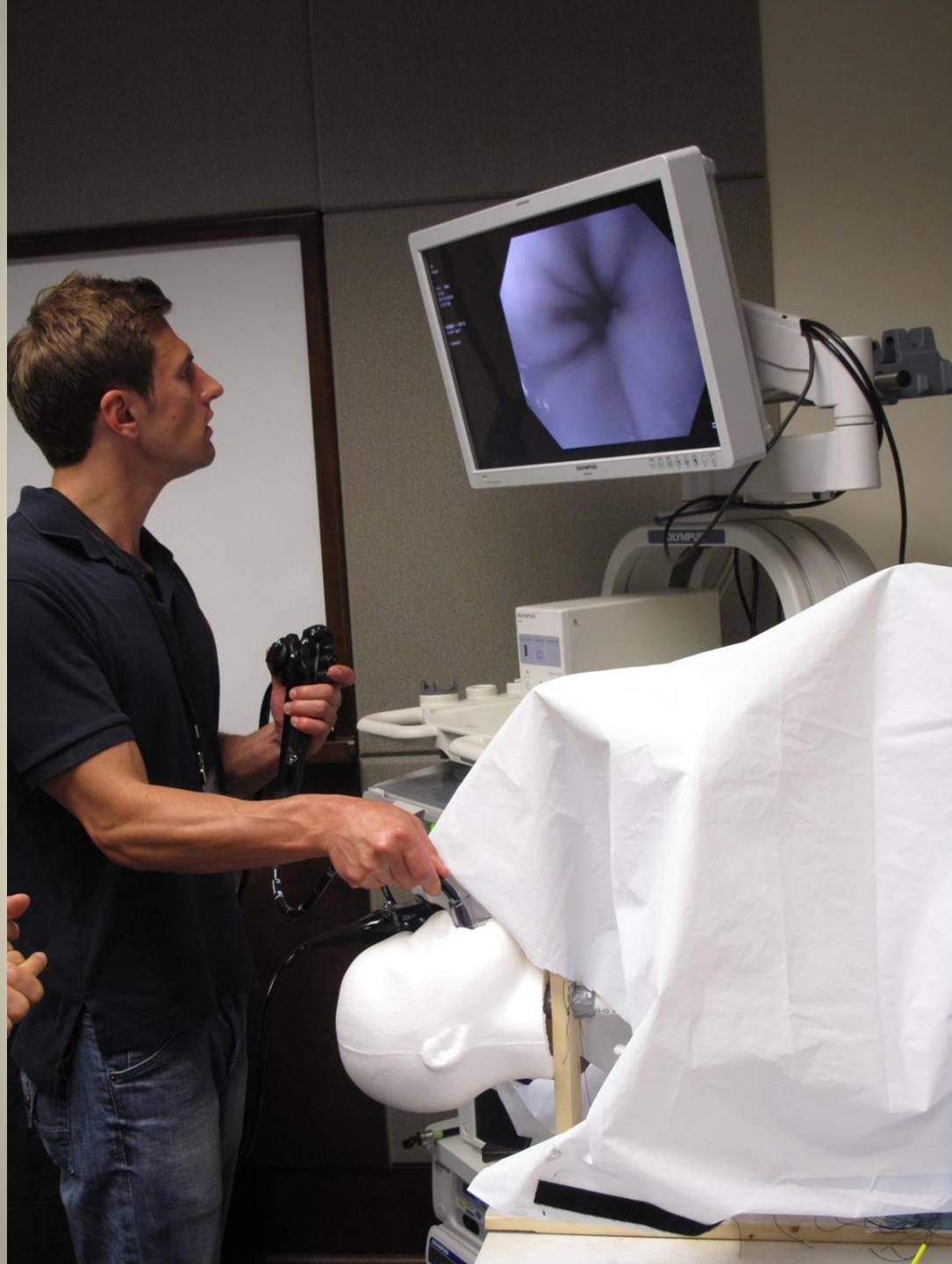
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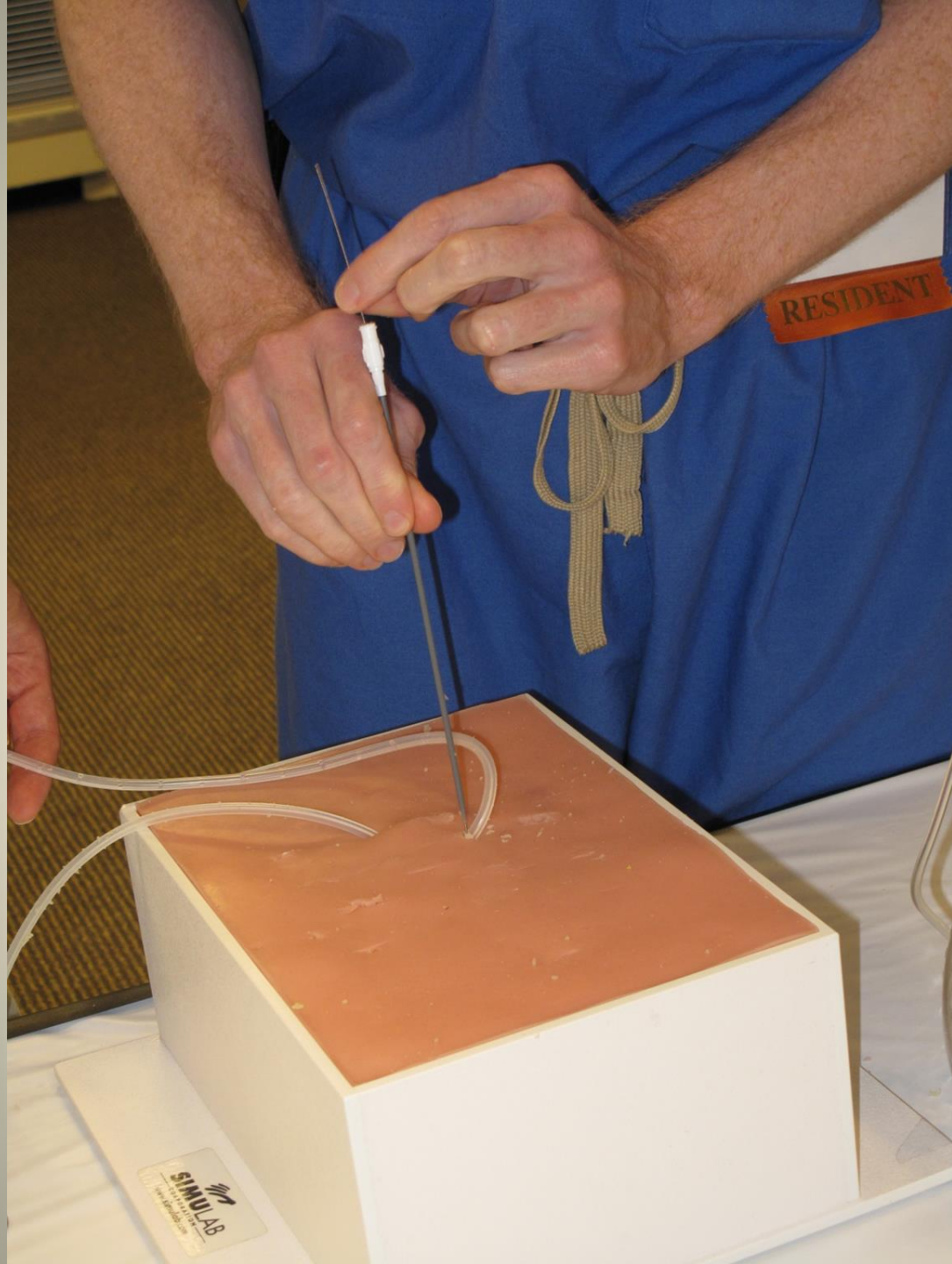
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**BRONCHOSCOPY/  
MEDIASTINOSCOPY**





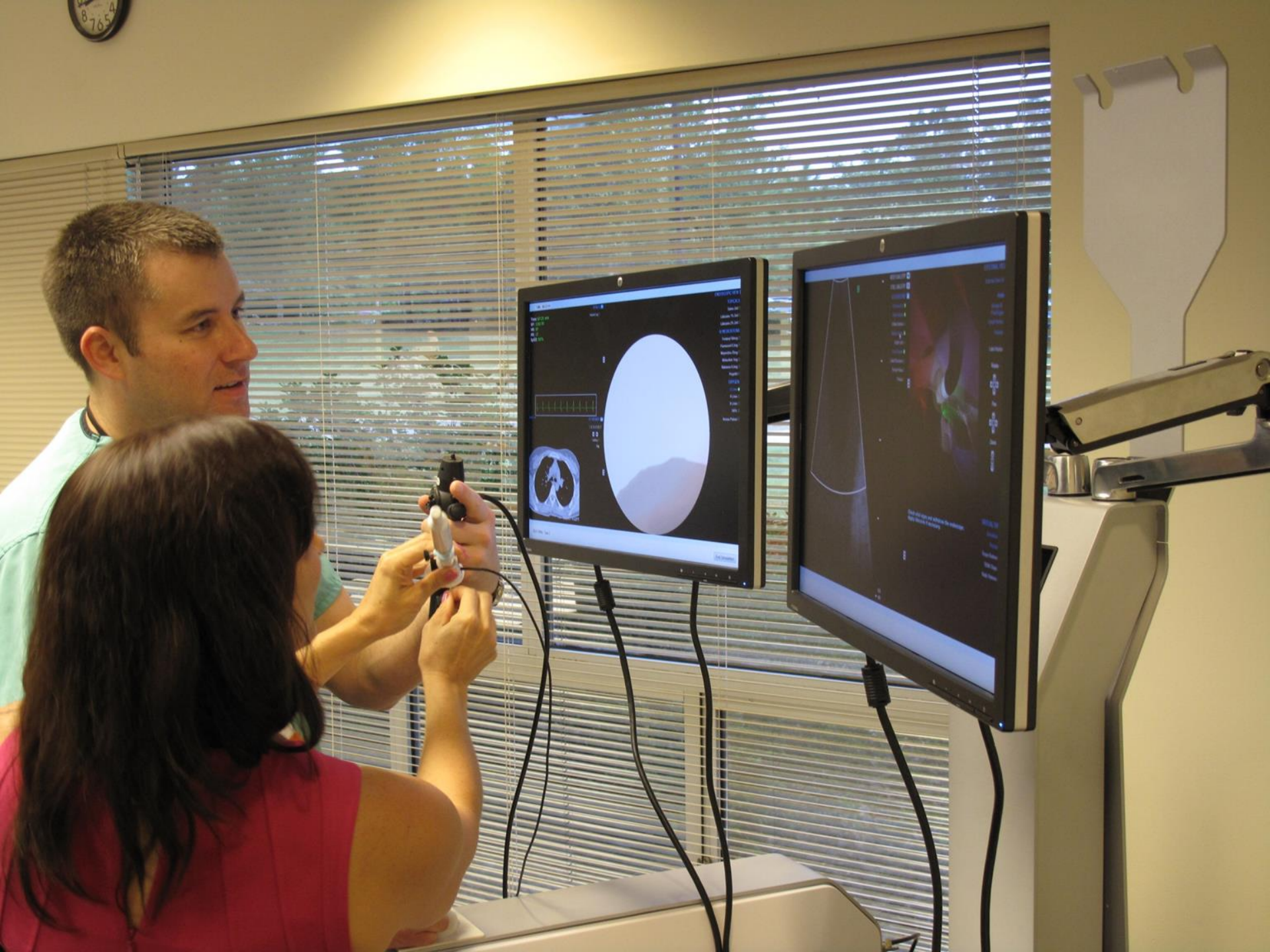




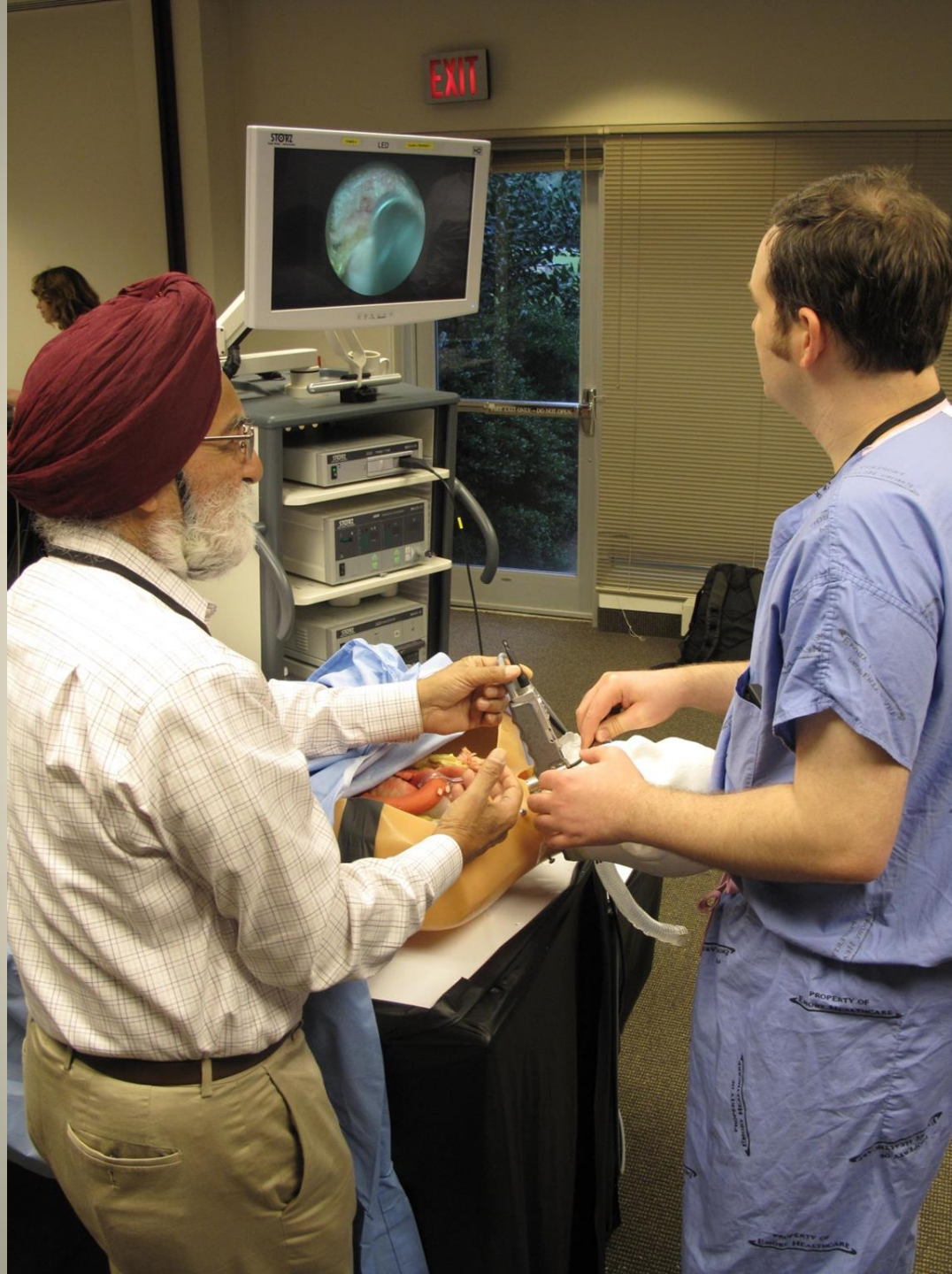




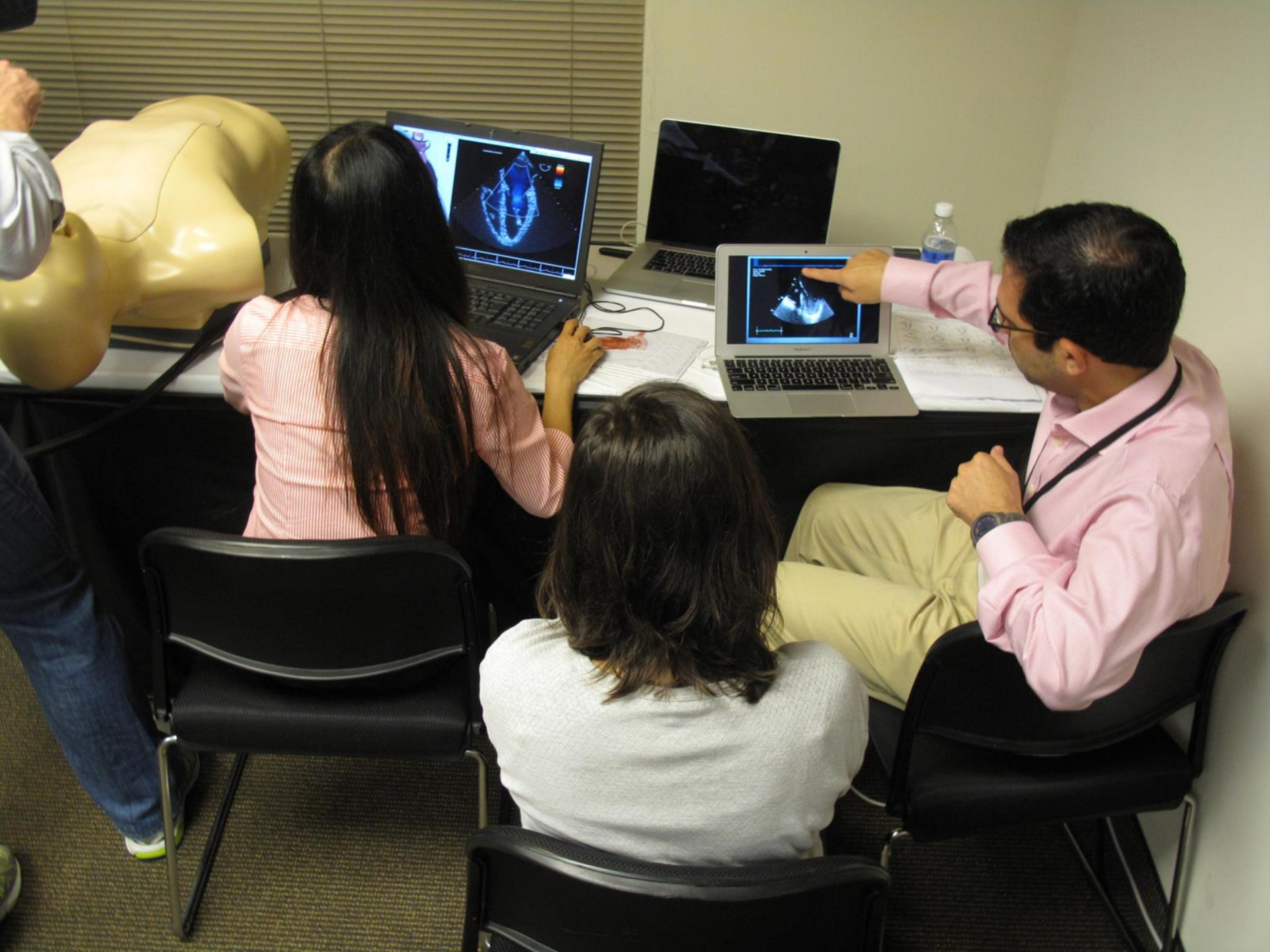












**T\*S\*D\*A  
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**Orientation to  
AORTIC VALVE  
SURGERY**

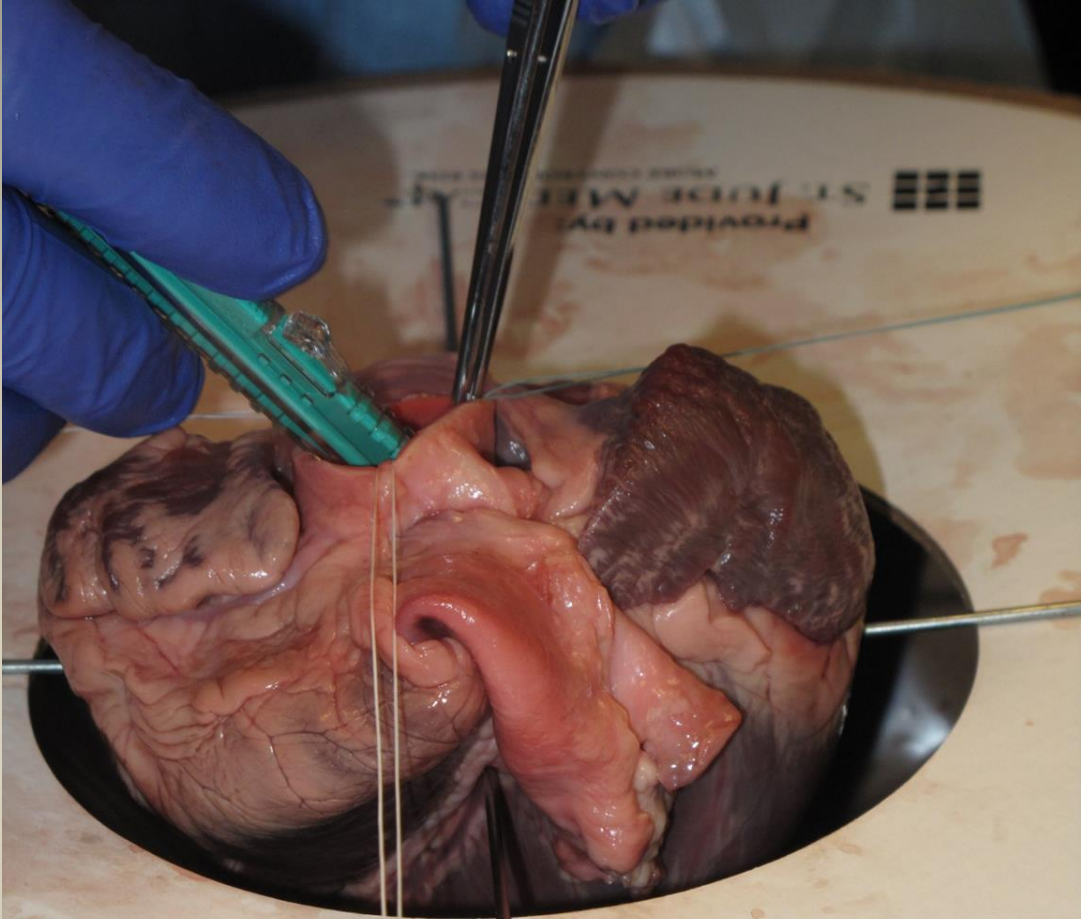
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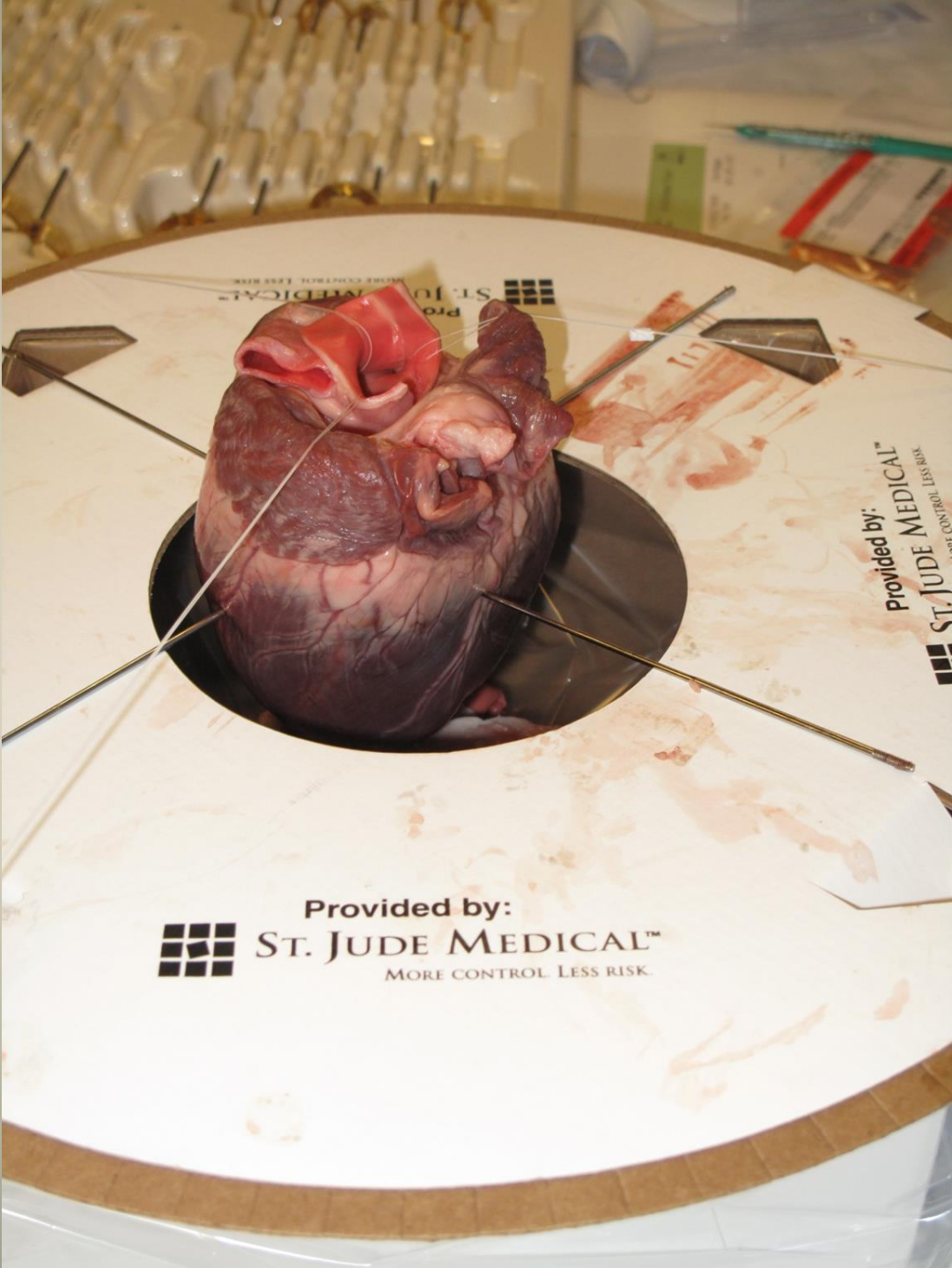






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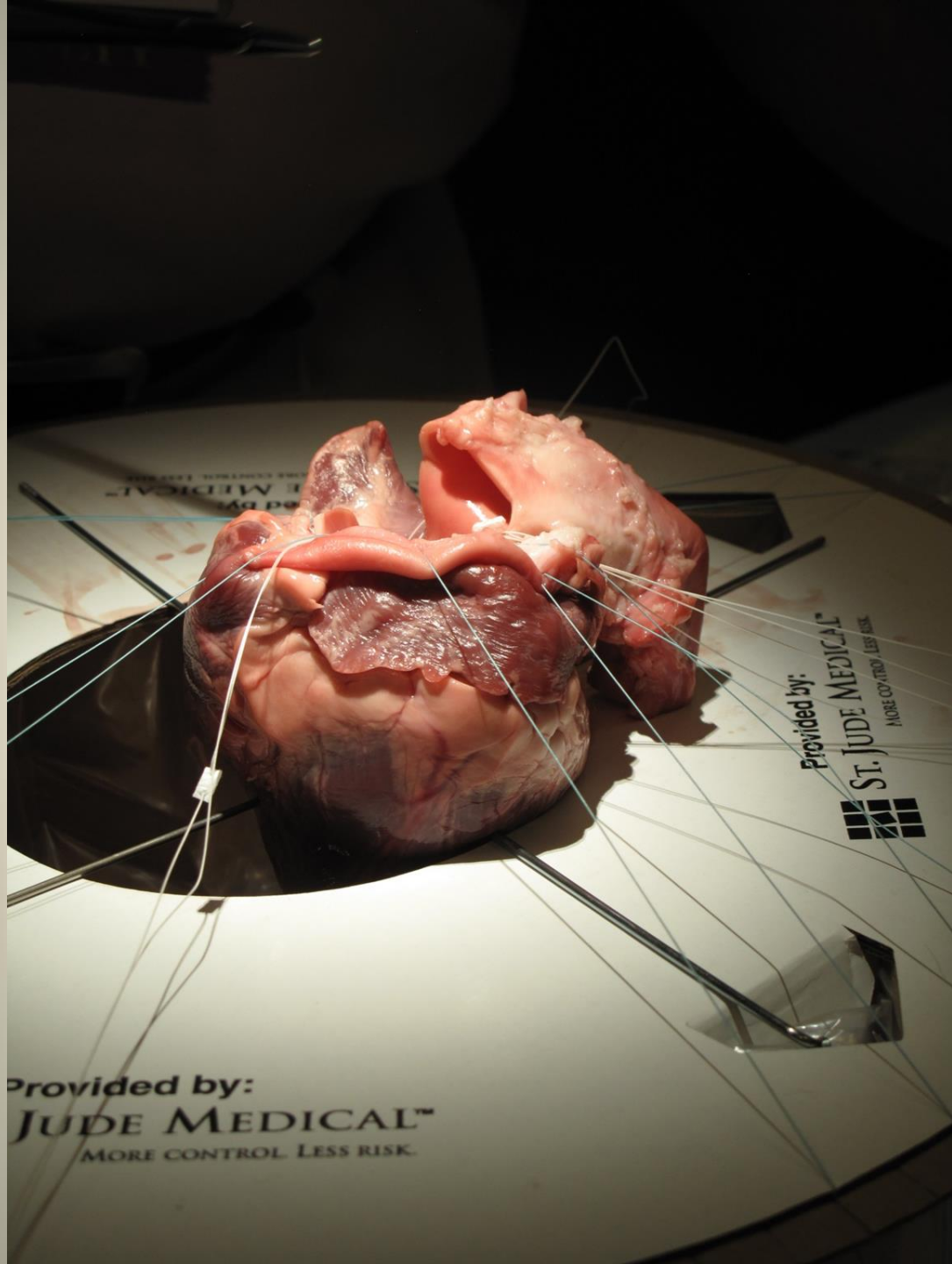
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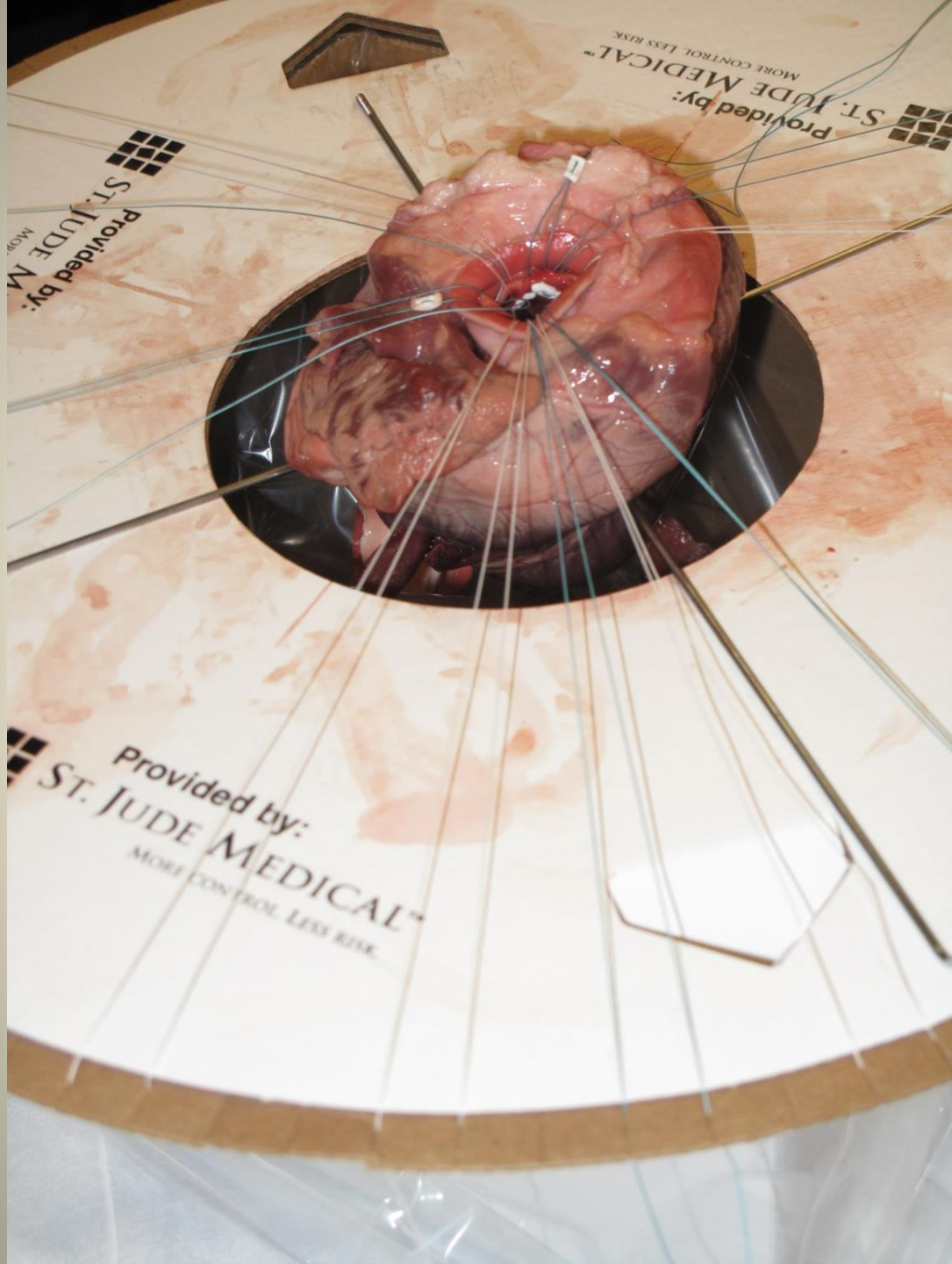






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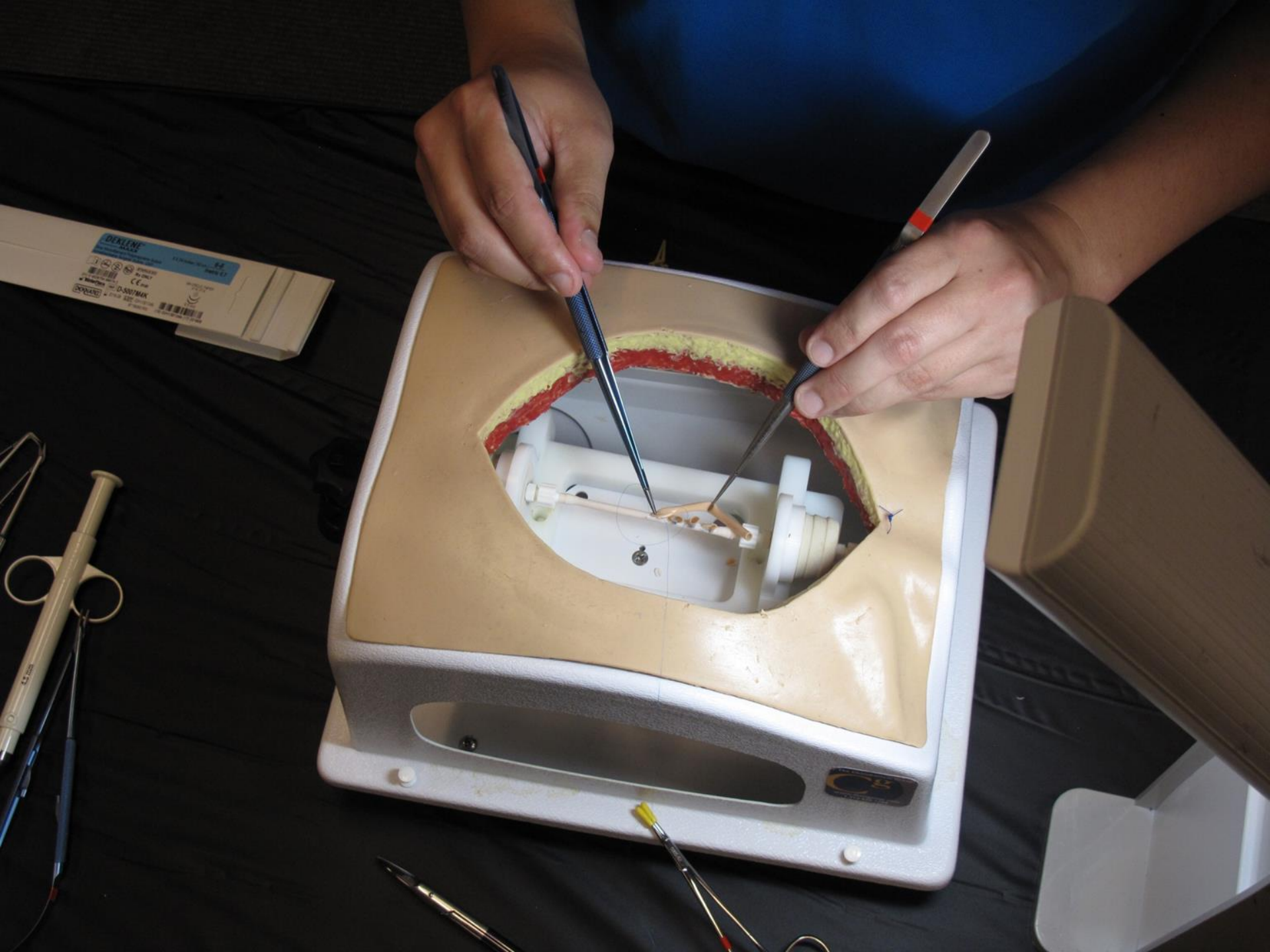
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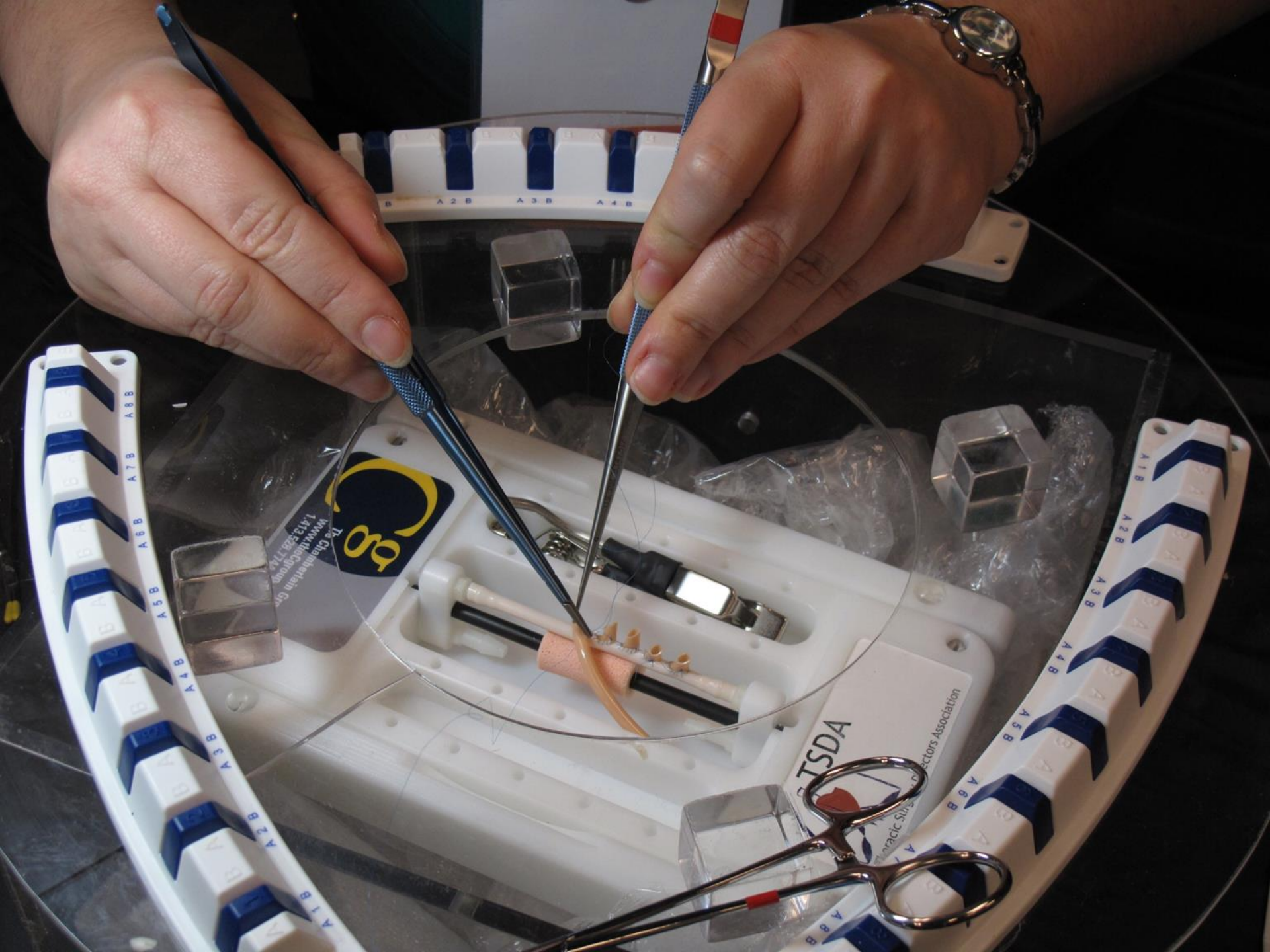
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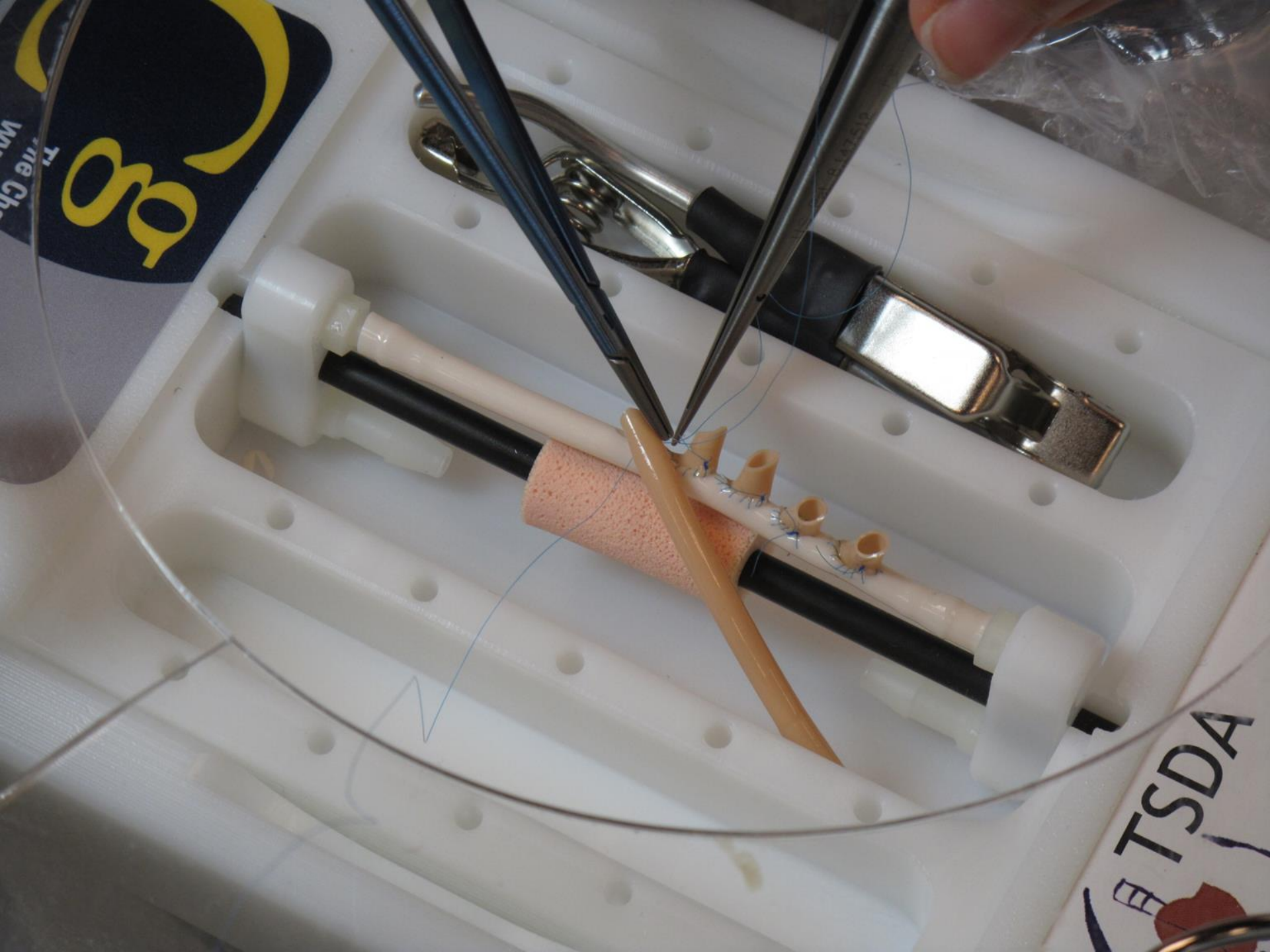








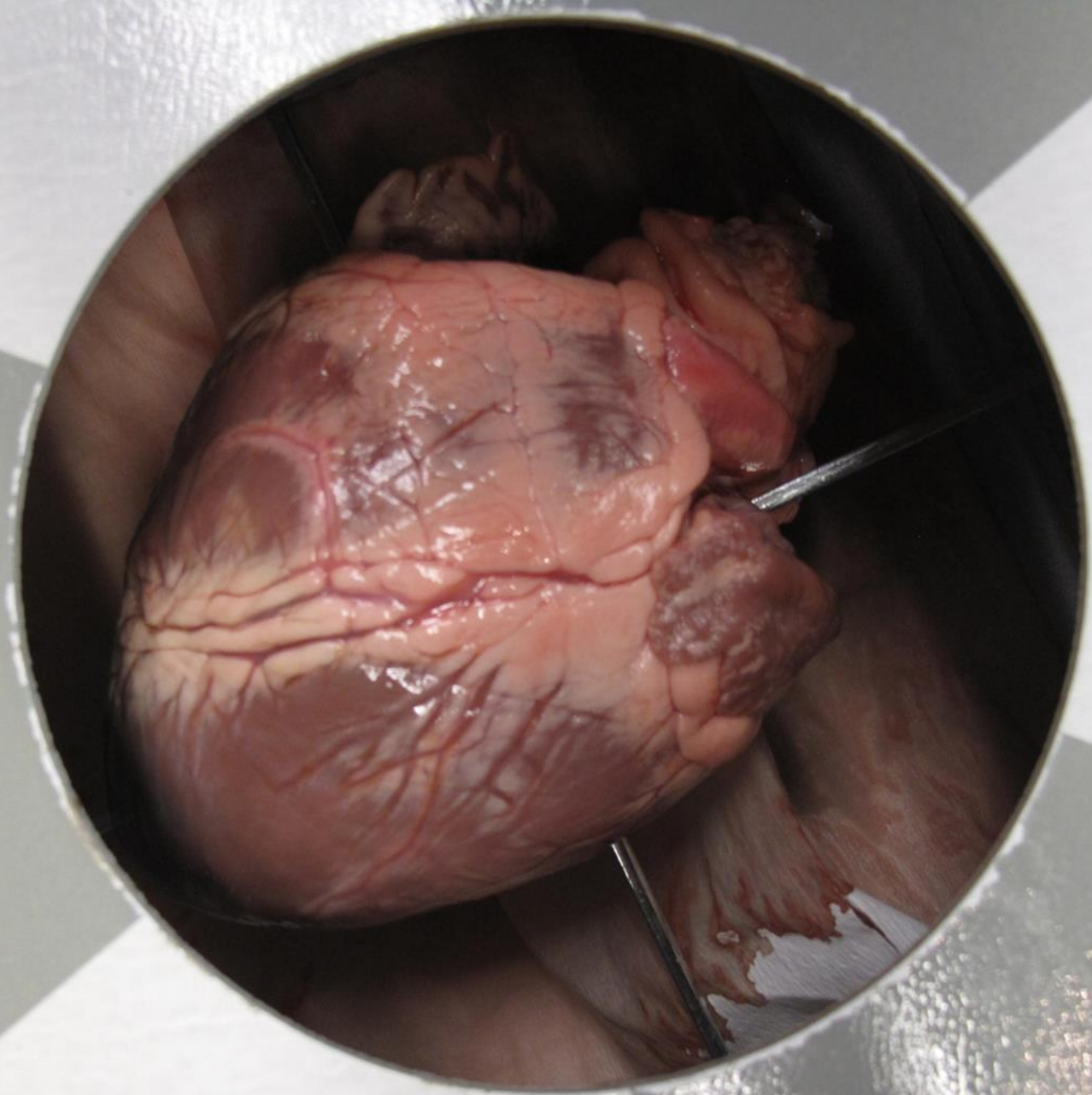




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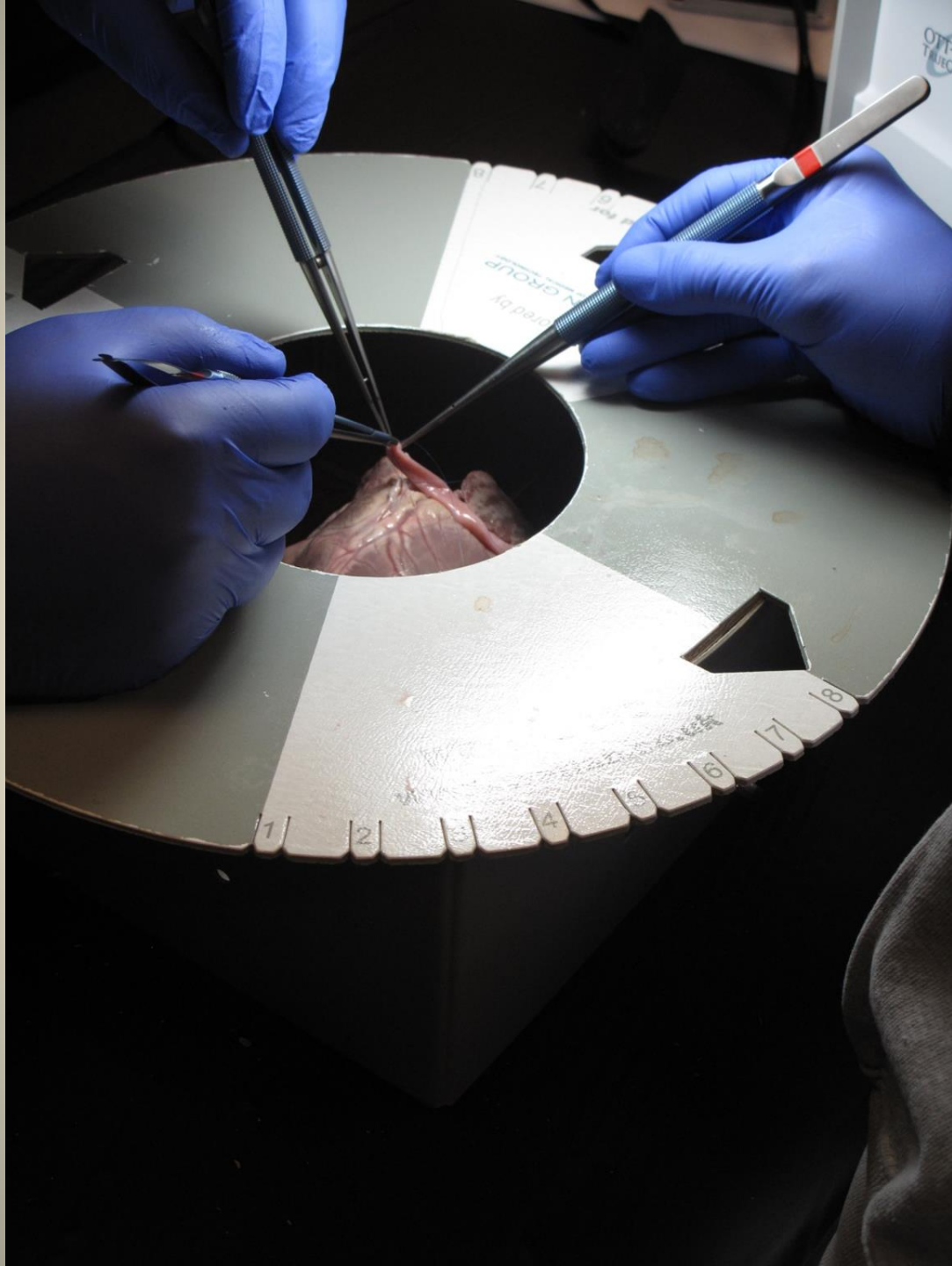




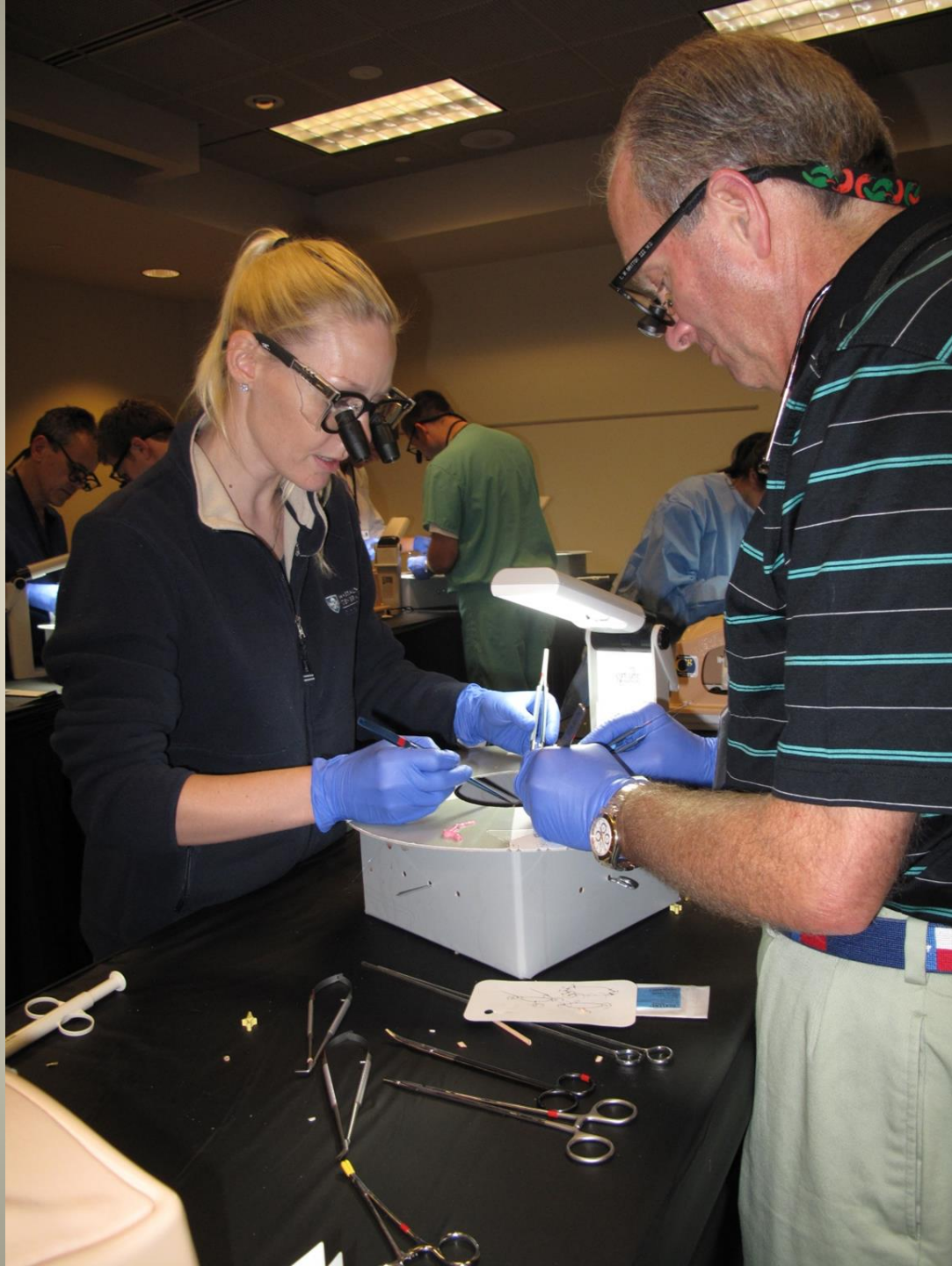


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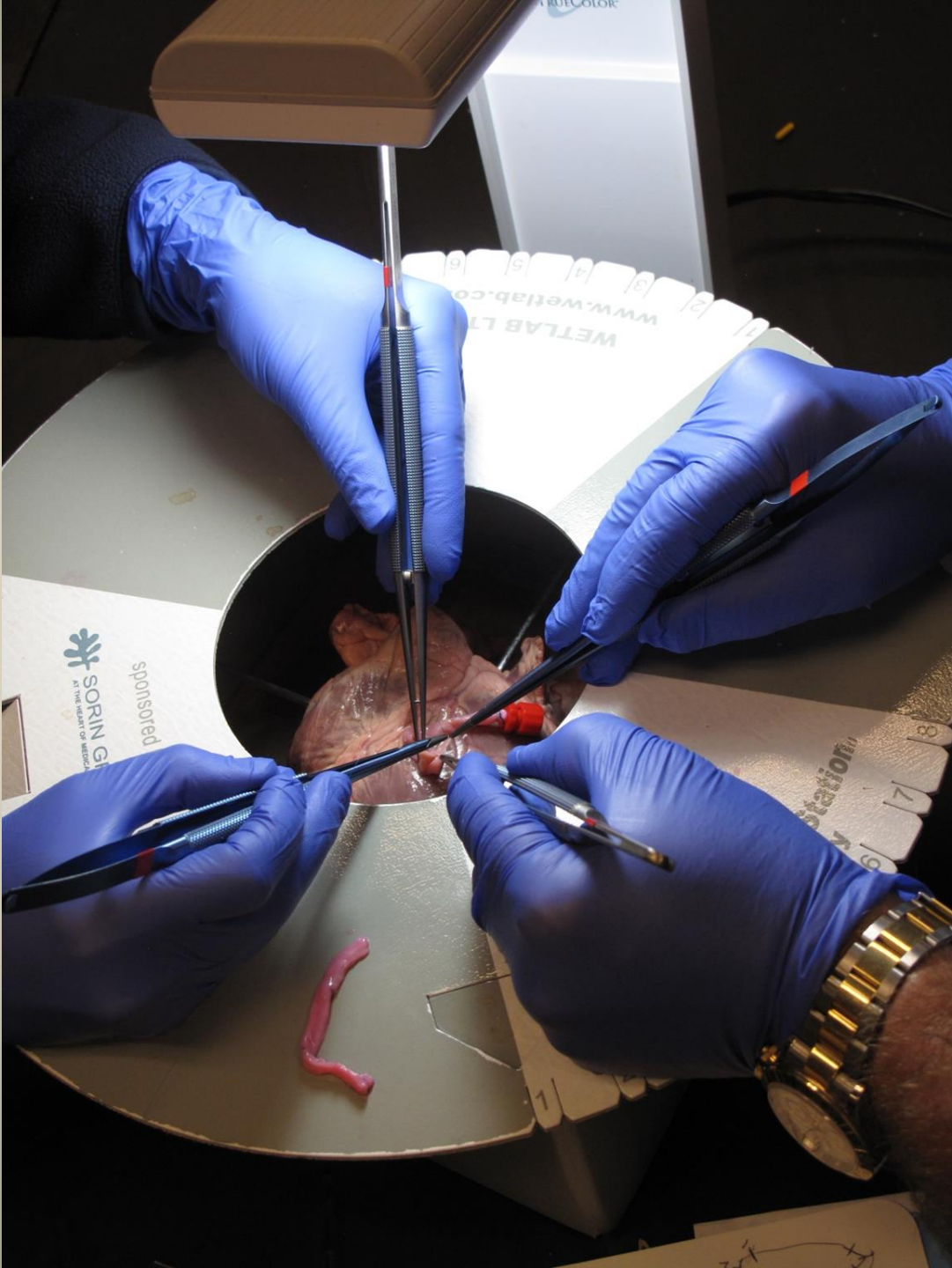


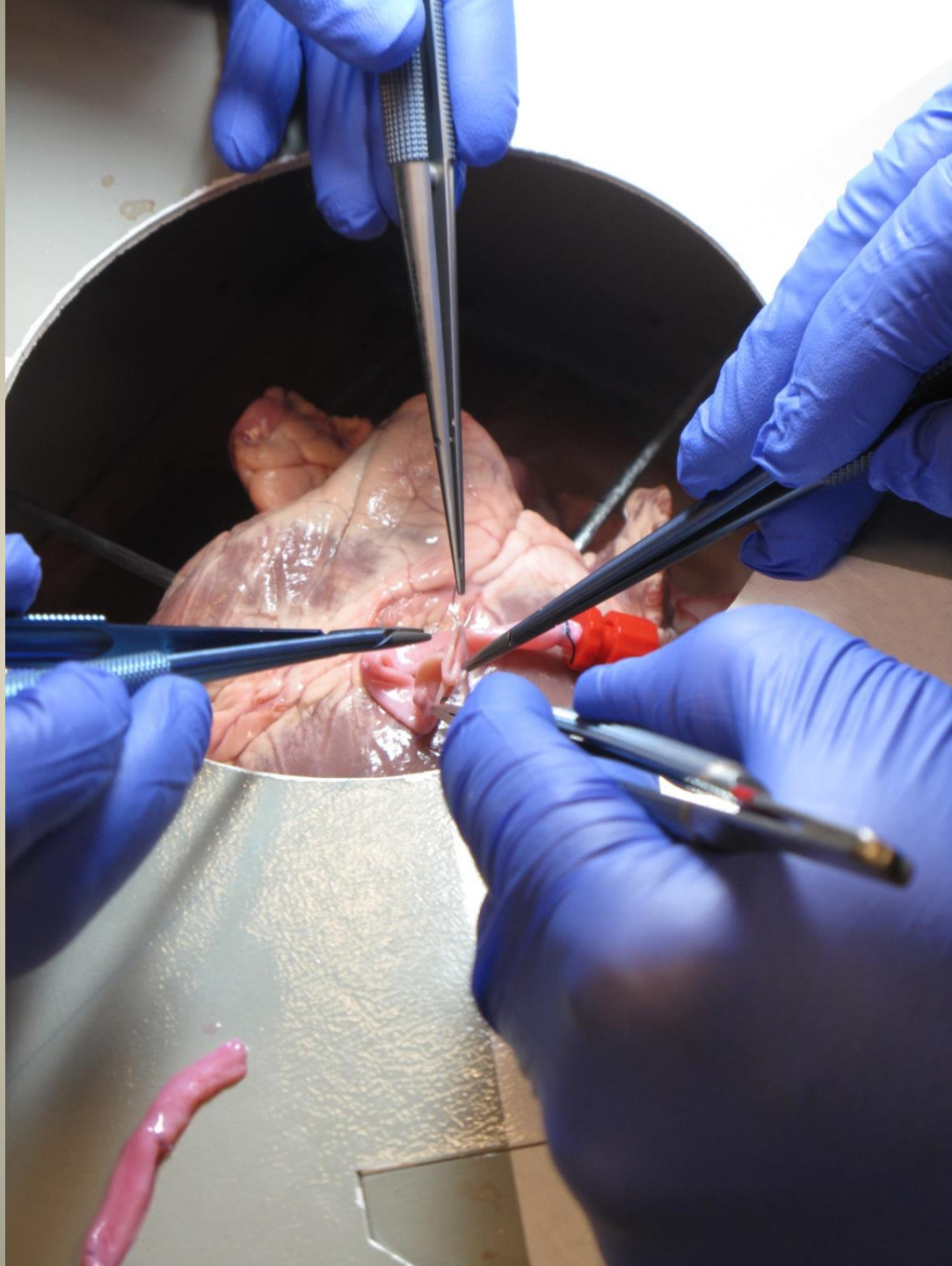








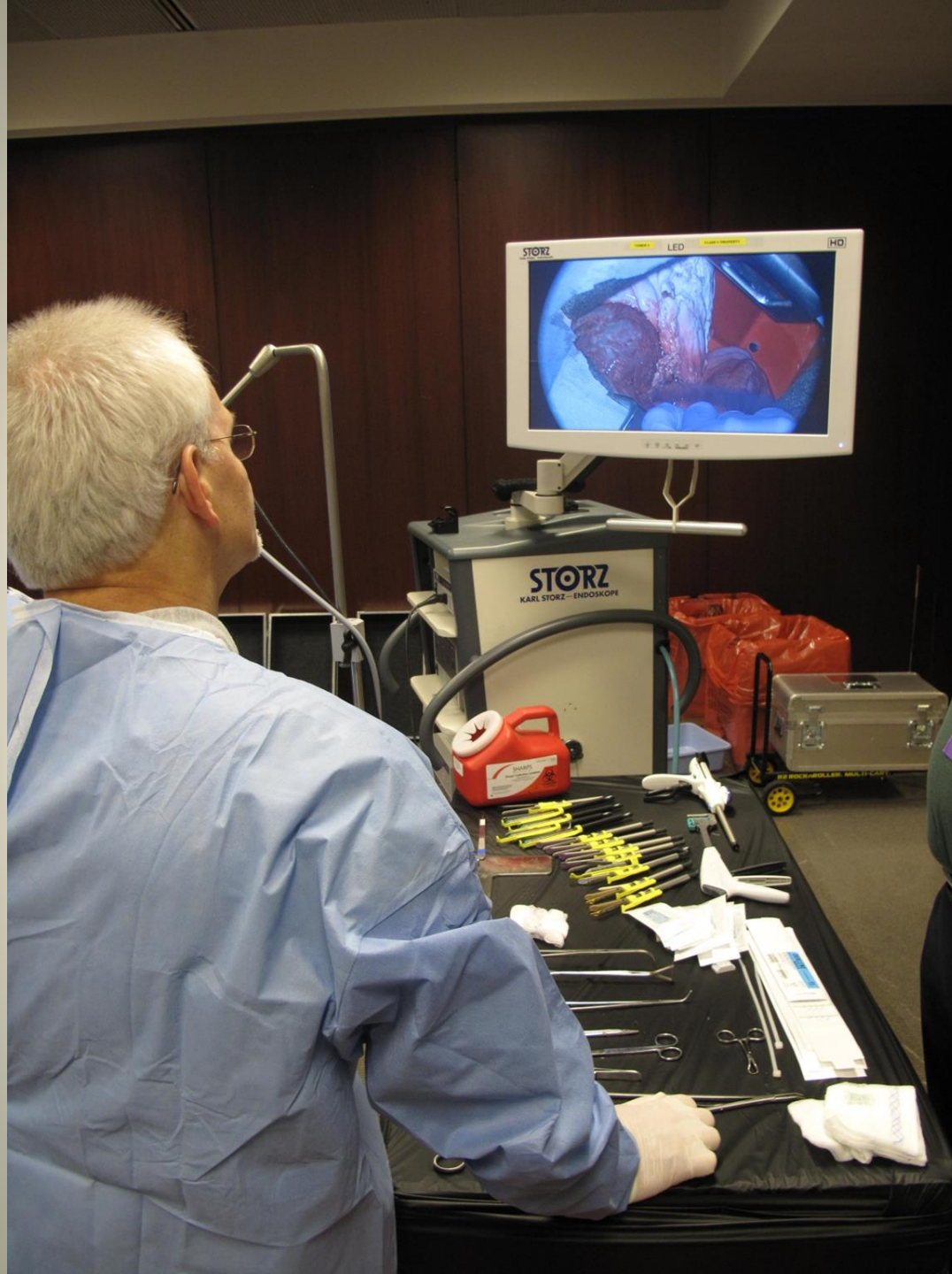




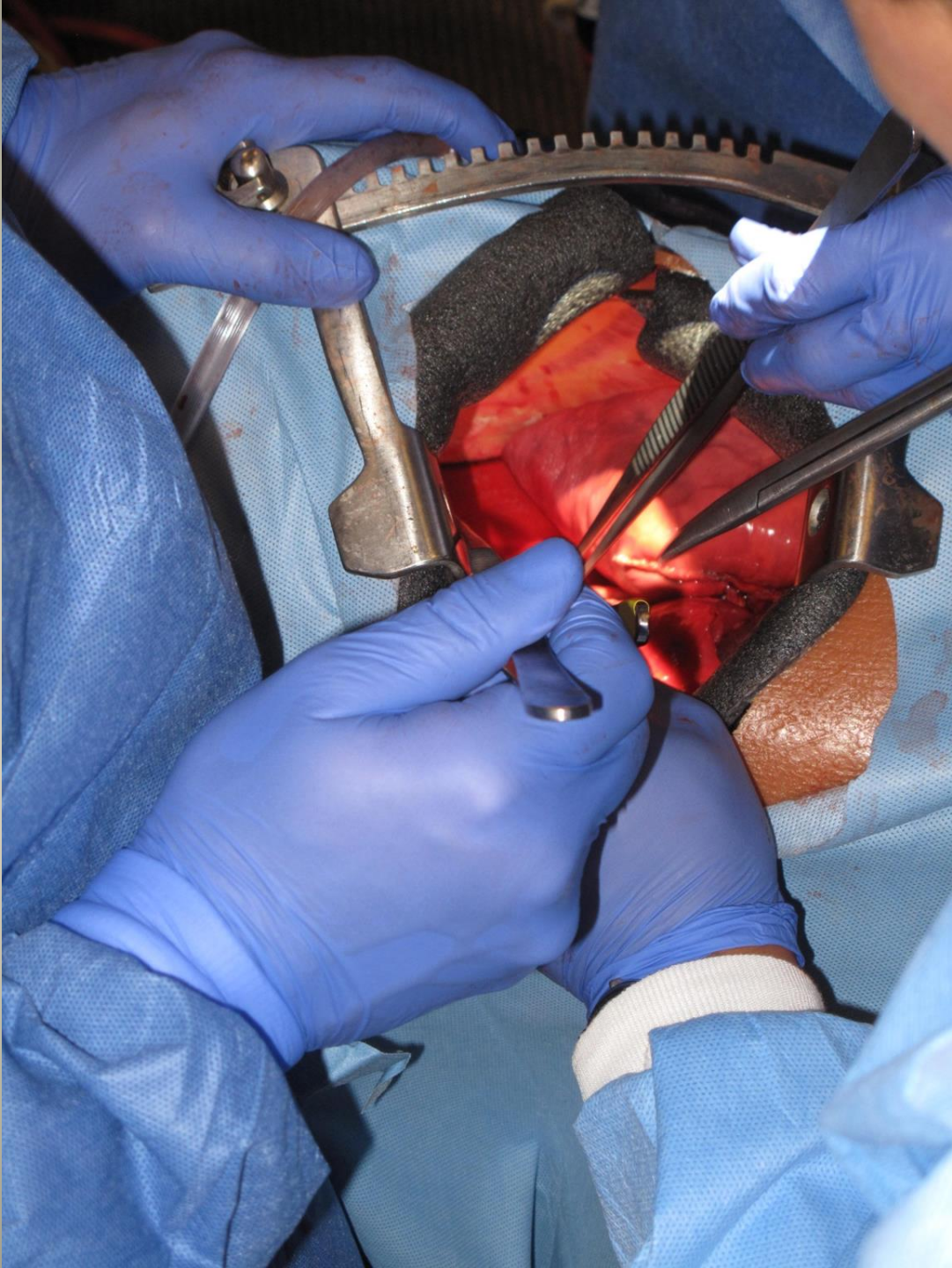


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**OPEN  
LOBECTOMY**

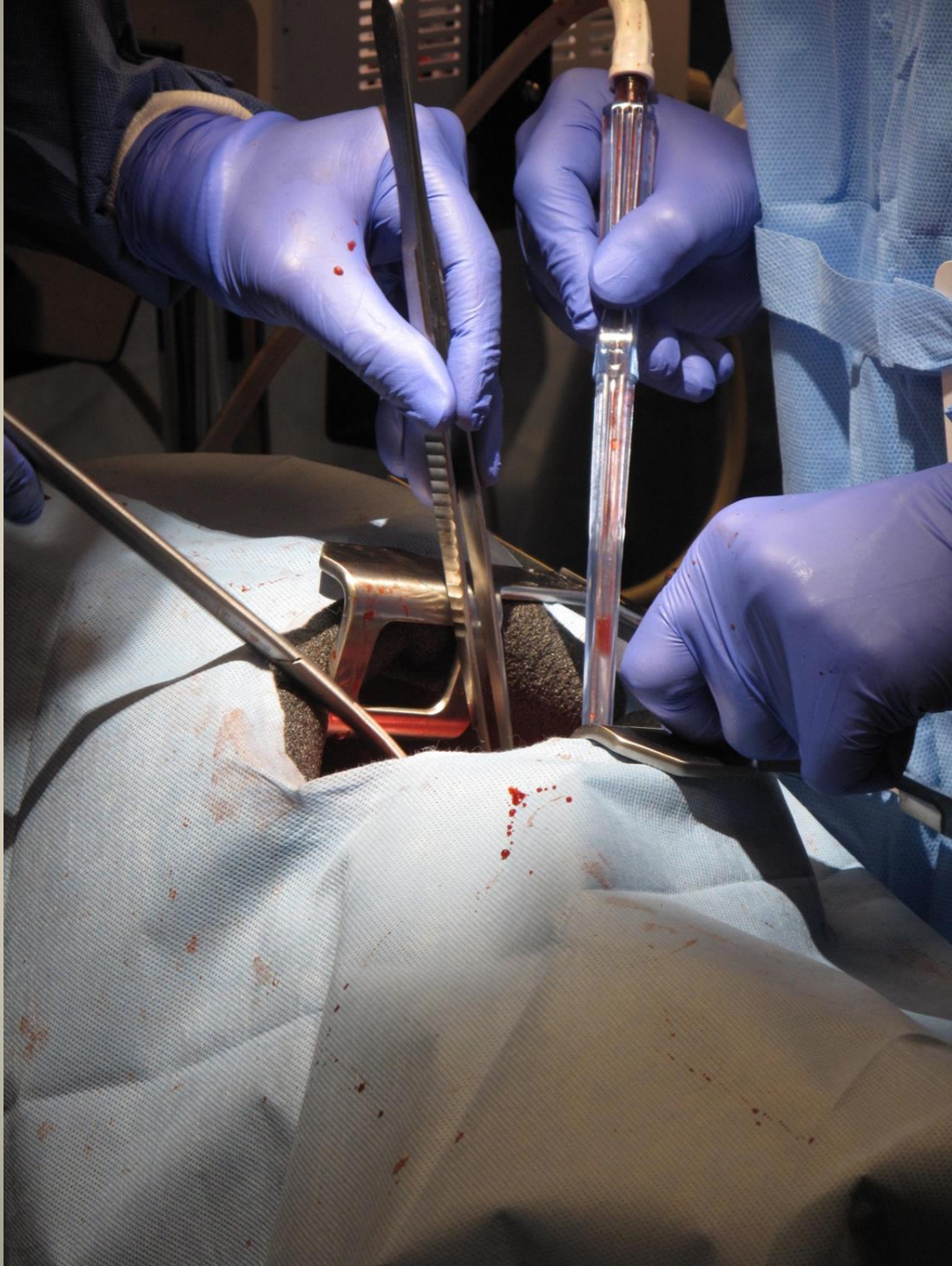


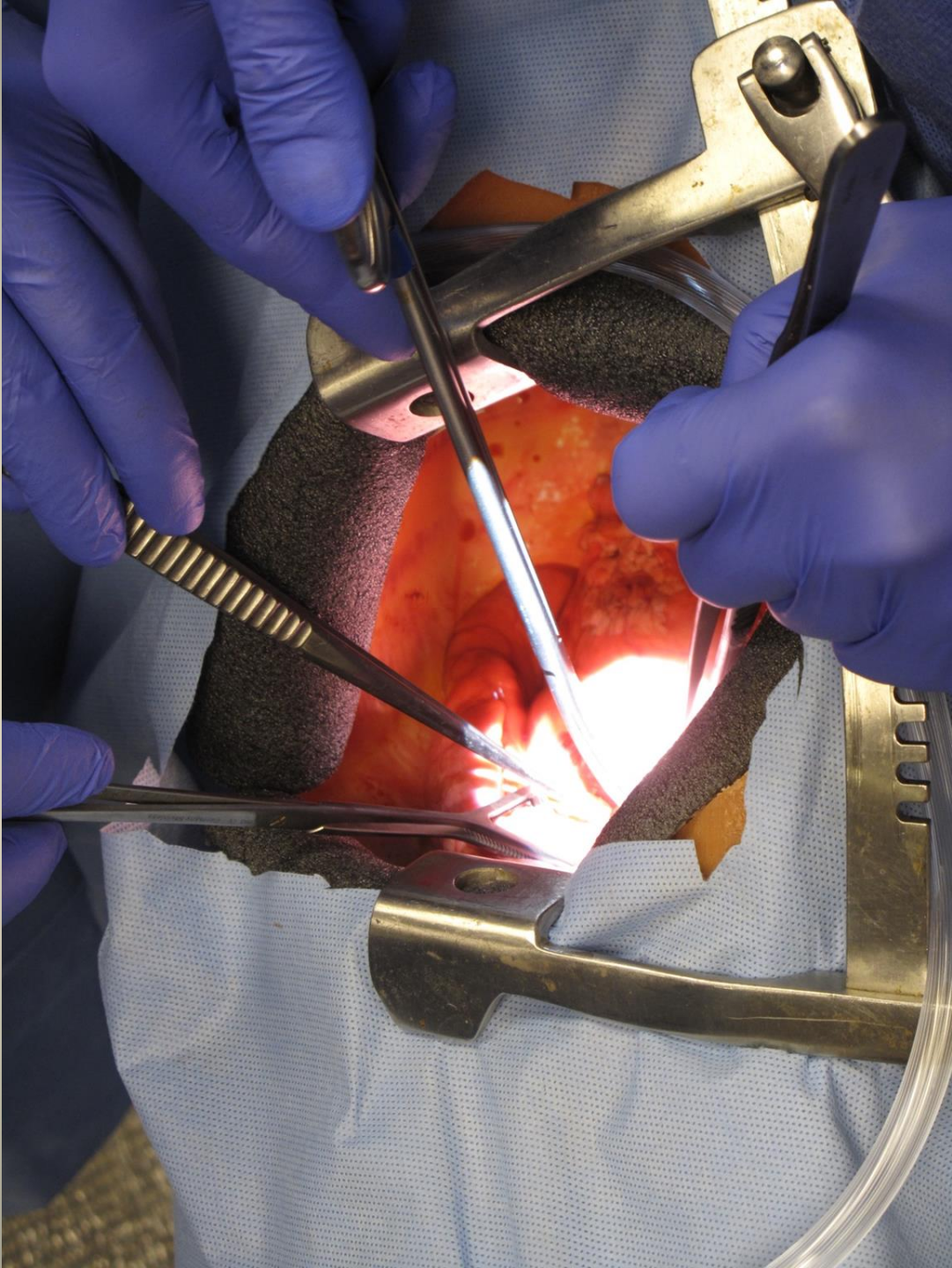












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ARISTA AH 3 gm  
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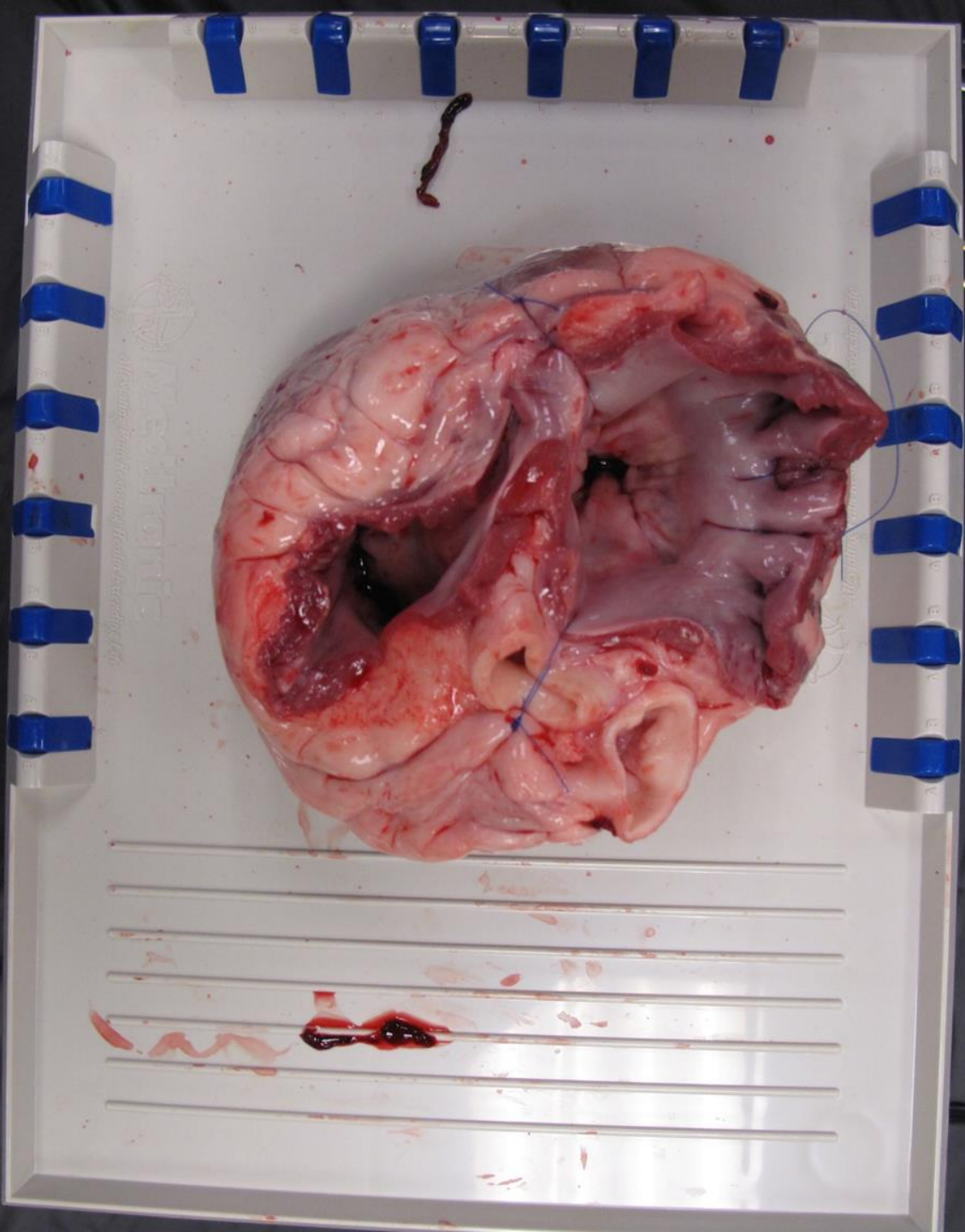


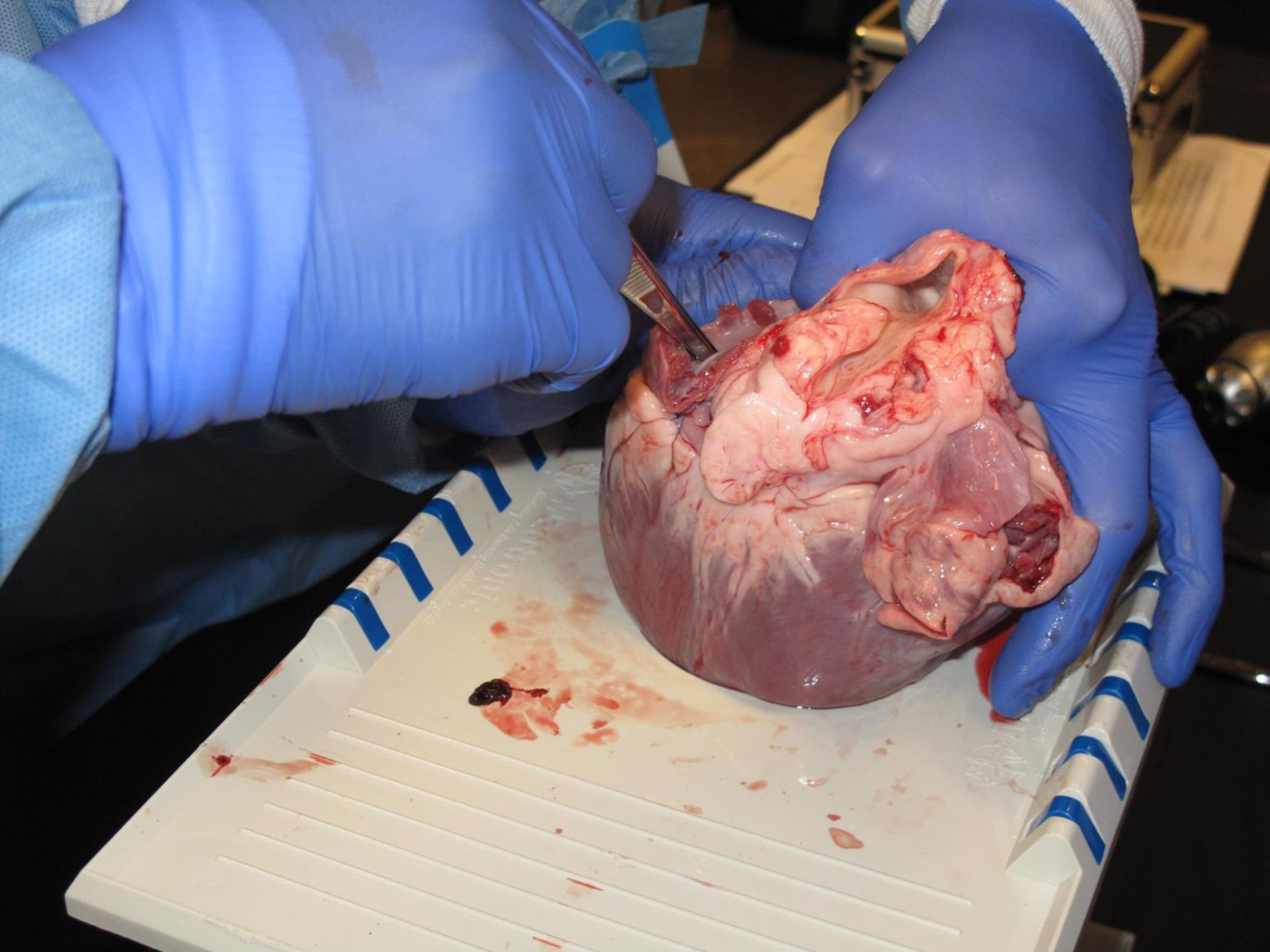


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**Introduction to  
MITRAL VALVE  
SURGERY**

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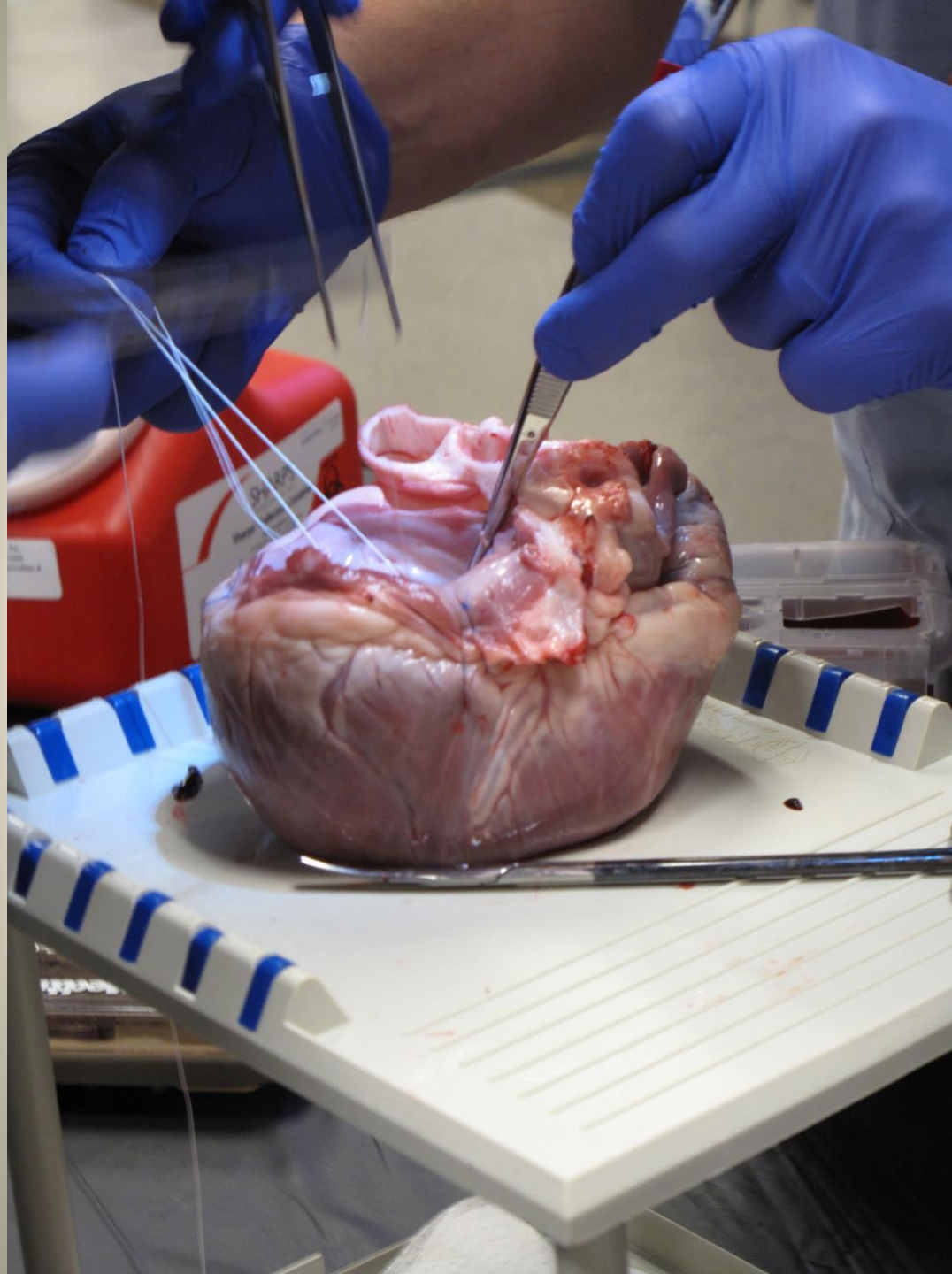


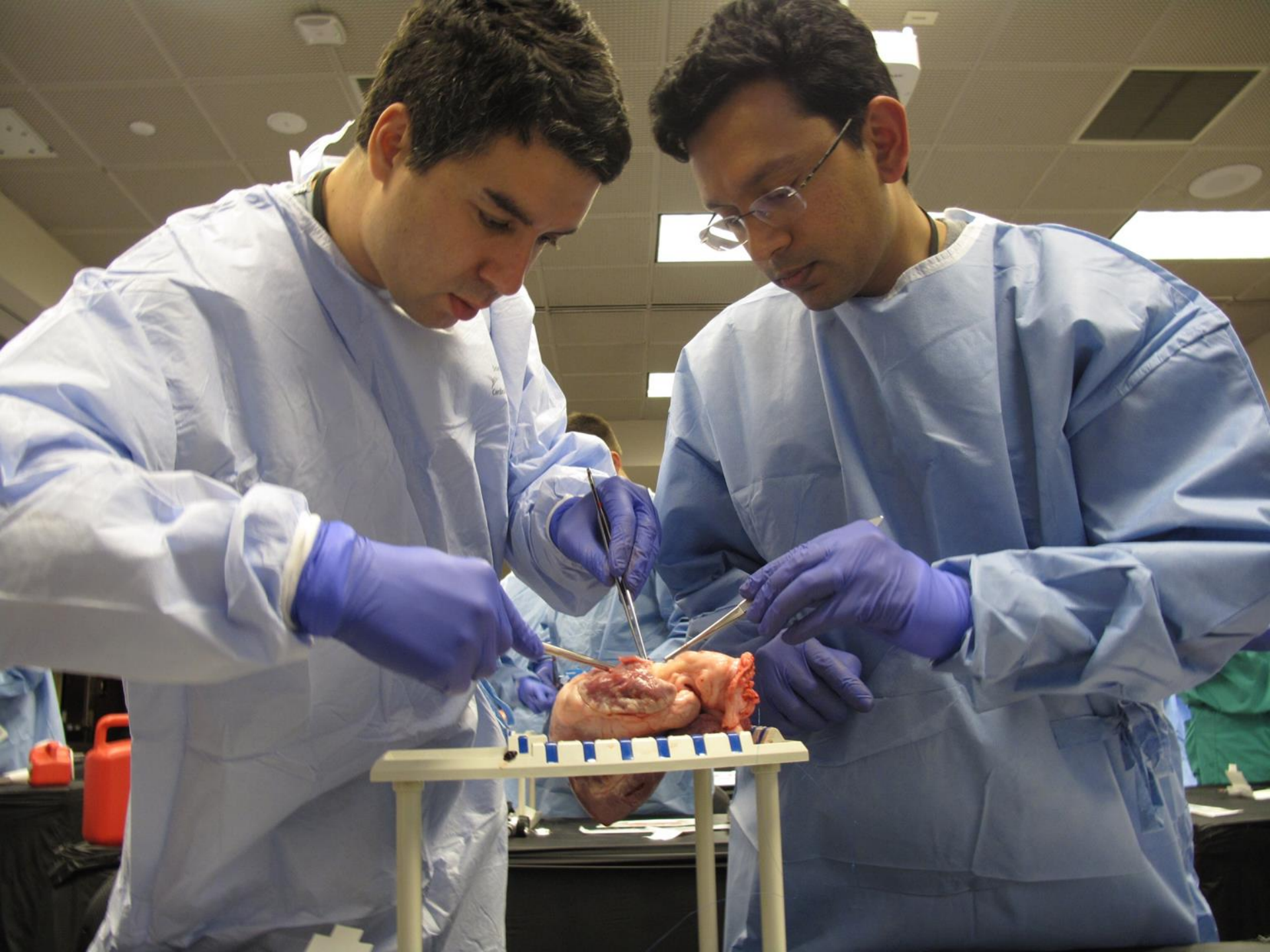














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Weller, Jennifer MD  
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FACULTY

UNC STUDENT STORES





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