# Initial Setup

1. Power on Laparoscopy Tower
2. Power on Tracking System
3. Power on Shingo’s laptop
   1. Open CoolTerm
      1. Go to OPTIONS
      2. Select PORT COM4
      3. Baudrate 115200
      4. Click OK
   2. Open GitHub desktop
      1. Click fetch origin!
   3. Open NDI Track
      1. It should connect automatically. After a few seconds, the tracking should show the sensors’ positions.
         1. If this doesn’t work
            1. Check connections. Power, sensors, field generator, USB
            2. NDI’s software is SUPER buggy. Try restarting the computer.
            3. Worst comes to worst, call Fabian

0033 7 82 99 31 33

* + 1. Go to View > and make sure Polar Spherical Format is checked

1. Make sure the footstool is in the right spot (just in front of the tape line)
2. Ensure the camera is in the right position – 15cm from the center screw of task 1
3. Setup guidance material
4. Make sure you have enough forms for the day
5. Get a coffee

# Procedure per participant

1. Create PARTICIPANT FOLDER
2. INTRODUCE the study
3. Show the TUTORIAL VIDEO
4. Place TASK 1 in box
   1. Connect MARYLAND forceps
      1. Sensor to port 1
   2. Reference sensor 1 (loose cable) to port 3
   3. Reference sensor 2 (loose cable, red flag) to port 4
   4. Place Reference Sensor 1 in the right reference sensor holder
   5. Place Reference Sensor 2 in the left reference sensor holder
   6. CONNECT the BLUE CABLE to the Marylands’ monopolar connector
   7. CONNECT the BLACK USB to the PC and the Arduino
   8. Go to COOLTERM.
   9. Press CTRL + R to start recording
   10. NAME the recording file, place it in the PARTICIPANT FOLDER
   11. Press CONNECT



* 1. On NDI Track, click
  2. In the record tracking window:
     1. Click Browse and create a new file in the participant folder
     2. IMPORTANT: DOUBLE CHECK THAT THE FILE NAME IS UNIQUE, OR YOU WILL OVERWRITE STUDY DATA!
     3. Ensure all sensors are blue in the RECORD TOOLS box
     4. Click start recording

1. Guide the participant through the exercise
2. Upon finishing:
   1. CoolTerm: Ctrl+Shift+R to stop recording
   2. NDI track: click close, then close again
   3. Unplug the USB and the blue cable
   4. Remove the reference sensors from the Task board
3. Remove the task board from the box

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1. Remove TASK 1, Place TASK 2 (Peg transfer)
2. Check Reference sensor 1 (loose cable) to port 3
3. Check Reference sensor 2 (loose cable, red flag) to port 4
4. Place Reference Sensor 1 in the right reference sensor holder
5. Place Reference Sensor 2 in the left reference sensor holder
6. Place triangle on right red peg
7. Guide participant through task
8. Upon finishing:
   1. Remove the reference sensors from the Task board
   2. Remove TASK 2, place TASK 3

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1. Check Reference sensor 1 (loose cable) to port 3
2. Check Reference sensor 2 (loose cable, red flag) to port 4
3. Place Reference Sensor 1 in the right reference sensor holder
4. Place Reference Sensor 2 in the left reference sensor holder
5. Insert Maryland forceps on the right hand
6. Insert Atraumatic forceps on the left hand
   1. And connect the sensor cable to port 2
7. Guide participant through task

# At the end of each day

1. Power down all equipment
2. Open Github desktop
   1. You should see all the changes to the data that were made that day
   2. In the summary box write “Day x Participant data”
   3. In the description box, write:
      1. Testing conducted by:
      2. Participants tested that day
      3. 3D / 2D / 4K
   4. If you are satisfied, click commit
   5. When the commit completes, click Push to origin to save all your changes and back them up to the cloud.
   6. Make sure this process completes!
3. Tidy up!
4. Turn off the lights
5. Go home, eat, have a beer, pat yourself on the back for being a great scientist.