

# Fall 2015 CIPI Protocol

## Perpetual Maintenance:

**At the beginning of each week, check to ensure that:**

1. there are plenty of consent forms and compensation receipt forms in the organizer in the Data Cave. If there are not, print new ones.
2. there are enough of both hand and surface wipes, both EDA and ECG electrodes, and 10 dollar bills. Be proactive in alerting Professor Settle and John so we have ample warning to restock.
3. there is enough water in the kitchen sink. To refill the tank, use the funnel at the water fountain. When the used water is near the full line, dispose of it in the bathroom.

**Always be aware:**

1. Be exceptionally careful with the equipment in the Data Cave – it is very expensive. Do not eat or drink in this room.
2. Temperature control is key to psychophysiological research. At the first sign of trouble, fill out a maintenance request here: <http://www.wm.edu/offices/facilities/workorders>
3. Williamsburg is prone to thunderstorms, so keep an eye on the weather report. If there's a high chance of a storm, be prepared for the participant to cancel or to notify the participant if the power goes out (this is especially a concern when proctoring non-students).
4. The bathrooms leave something to be desired. Make sure that the lights are on and there aren't any dead cockroaches or other disgusting things.
5. The light in the data cave should always be kept off when there are participants in the Participant Room so they don't notice the window between the two as much, especially once lights in the Participant Room are turned off.

## Day Before Proctoring:

1. Print two copies of the daily proctoring schedule for the next day and put it on the proctoring clipboard. The schedules should be posted in the govtomni drive, in the CIPI\_F15 folder.
2. Set up the Data Cave:
  - Check to make sure that the BioNomadix units are charging. If they are not, plug them in.
3. Set up the Participant Room:

- a. Check the next day's list for the first participant's handedness. Set up the laptop desk accordingly.
  - b. Check whether the first participant wears hearing aids that preclude the use of headphones. If so, set up the external speakers.
  - c. Check that the chair and monitor are positioned on the tape marks on the floor.
  - d. Check that all the cords are connected:
    - VGA cord from SuperLab iMac to external monitor, through the wall
    - Headphone extension cord to the SuperLab iMac, through the wall
  - e. Ensure the room looks tidy.
4. Set up the debriefing (conference) room:
    - a. Arrange chairs so it looks nice and organized.
    - b. Check trash cans for excessive trash.
  5. Check the water tank levels in the kitchen sink:
    - a. If the used water tank is full, empty it in the bathroom.
    - b. If the clean water tank is empty, use a rolling chair to move the tank to the water bottle refill station down the hallway, and use the funnel and attached tube to refill.

## **Day of the Study:**

### **Before the first participant arrives:**

1. Make sure the debriefing (conference) room is neat.
  - a. Set out a debriefing form.
  - b. Arrange chairs so it looks nice and organized.
  - c. Check trash cans for excessive trash.
  - d. Write "Thank you for your participation in the research study!" or something similar on the whiteboard.
2. Check the water tank levels in the kitchen sink.
  1. If the used water tank is full, empty it in the bathroom.
  2. If the clean water tank is empty, use a rolling chair to move the tank to the water bottle refill station down the hallway, and use the funnel and attached tube to refill.
3. Turn on the sink. To do this, open the doors underneath, and flip up the switch on the upper right-hand inner wall of the sink. The pump will make a loud noise at first, this is normal.

- Additionally, the sink will need to be turned off at the end of each day.
4. Open the *AcqKnowledge* graph template file `CIPI_F15.gt1` located on the bottom right corner of the desktop.
  5. Open the SuperLab stimulus file `CIPI_F15.s15`, located on the desktop.
    1. Press the play button in the upper right hand corner of the SuperLab window.
    2. Do not enter any information in the resulting pop-up window.  
**If any boxes are checked, un-check them.**  
 Select **Main Group** for the participant group.  
 Press **OK**.
    3. You should now be prompted to enter the participant's party ID. Do so by pressing 'd' for *Democrat*, 'r' for *Republican*, or 'i' for true *Independents*. Use lowercase letters.
    4. Enter the treatment condition (by pressing the number key corresponding to their condition number).
    5. Enter the agreement condition by pressing either 'a' for *agree* or 'd' for *disagree*.
    6. Enter the knowledge condition by pressing either 'h' for *high* or 'l' for *low*.
  6. Load the Qualtrics lab survey on the laptop in the Participant Room.
    1. Enter the discussion treatment condition (agree/disagree; high/low knowledge), treatment number, party identification, video condition (political/apolitical), participant name, and participant ID number.
    2. Check data cave copy of daily schedule for participant's preferred handedness and hearing aid use.
      - Set up the small laptop desk on the side of the chair to match handedness.
      - If participant is unable to wear headphones due to hearing aids, turn on speakers.
      - Set the volume to 13% (two notches) for headphones or 25% (four notches) for speakers.
      - Run a sound check (even with headphones).
  7. Check to make sure that the room is set up:
    - a. Adjust the blinds as needed in Data Cave.
    - b. Check to ensure all furniture is placed properly on the tape marks
  8. Set out necessary forms in the foyer (informed consent and pens) and debriefing room.
    - All forms are located on their labeled shelves in the data cave.

### When participants first arrive in the SSRMC:

Follow the items on the separate checklist that is provided.  
That checklist is reproduced and elaborated here:

1. **Arrival time if waiting** – If you are unable to immediately begin proctoring, write down the participant’s time of arrival on the daily participant list. Do not proceed with the rest of the checklist until you are ready to proctor the full lab session for the participant.
2. **Informed consent form** – Have the subject sign the form, and put it in the manila folder. While they do, give them an overview:
  - a. **hooking up to equipment** – Explain that we’ll be attaching a couple of electrodes to their fingers, wrist, and ankles, the removal of which isn’t any worse than a Band-Aid.
  - b. **watch videos** – Explain they’ll be shown a few short video clips (informed consent may have wording about the video clips being potentially distressing, but if they pick up on this, ensure them that we haven’t had anyone have an issue with the videos yet).
  - c. **answer survey questions** – Explain that they’ll be answering some survey questions.
3. **Chewing gum** – Ask if they’re chewing gum, and if so, have them dispose of it.
4. **Cell phone** – If they have one with them, ask them to turn it off. Inform them that having it go off, even on vibrate, can damage the data we collect.
5. **Jewelry/watch removal** – Ask them to remove all jewelry on their wrists and hands.
6. **Bathroom** – Inform them that if they need to use the bathroom, now is the time. If they do go, note it in the lab log since (presumably) they’ll wash their hands with soap.
7. **Rinse hands** – Direct them to rinse their hands in the kitchen sink. Warn them that the sink is noisy.
8. **Building noise** – Warn the participant that building noise is loud but common.
9. **Mental notes for lab log** – If there are any abnormalities, or the participant seems agitated, or out of breath, or you notice that it is hot, or anything of this nature, make a mental note and record it in the lab log once the session begins.

### Starting the Lab Session:

1. Once you’ve completed the check-in checklist, direct the participant to sit in the chair in the Participant Room.
2. Before any electrodes are attached to the participants, clip the **red** and **black** leads to cloth EL504 electrodes.

3. Give the participant the Electrode Placement Handout and direct them to apply cloth EL504 electrodes to their arm and ankles according to the electrode handout:
  - Red – left ankle
  - Black – right ankle
  - Unattached – right arm
4. Place foam EL507 electrodes on the index and middle fingers of the participant’s non-mouse hand.
5. Show them the laptop on which they’ll be answering surveys.
  - a. Explain they will need to keep their arms still once study begins, when not using the laptop. Ensure that they can use the mouse comfortably and without excess movement of their other arm.
  - b. Ask them to answer the initial survey questions while leaving their non-mouse hand on the armrest (for practice).
  - c. Instruct them to close the laptop and ring the bell when they have completed the survey questions.
6. Leave the room while participant completes these first questions.
7. While out of the room, “**START**” the recording according to the instructions in the BIOPAC Manual in order to complete the initial EDA calibrations:
  1. Press **START**.
  2. Ensure that the BioNomadix unit is turned on and blinking green.
  3. Press **OK** on the first pop-up.
  4. As directed, make sure that the leads are attached to the unit, but not to any electrodes.
  5. Click **Calibrate**.
  6. **Do not click Continue on the next pop-up screen. Data collection will begin immediately after it is clicked.**
8. After the bell is rung, turn off the lights in the Data Cave, and re-enter the Participant Room.
9. Attach the white ECG lead to the electrode on the participant’s right forearm.
10. Attach the BioNomadix unit as described in the BIOPAC Manual.
  - a. Attach the BioNomadix unit to the wrist **opposite** the participant’s mouse hand.
  - b. Attach the EL507 electrodes on the participant’s hand to the BioNomadix unit’s leads:
    - Black – index
    - Red – middle
11. Give the participant a brief overview of what they will be asked to do:
  - a. Inform them that videos and instructions will be presented on the monitor.

- b. Make sure they understand that there will be blank screens in between these presentations.
  - c. Explain the lights will be shut off.
  - d. Instruct them to sit back, relax, and limit their motion as much as possible **including while nothing is on screen**.
  - e. Instruct them to ring the bell if they have questions.
12. Hand the participants the headphones, and instruct them to put them on.
  13. Remind the participant that they can stop their participation at any time.
  14. Turn off the light and leave the room.

### Collecting Data:

*AcqKnowledge* should already be set up, and calibrated, and you should see a pop-up from *AcqKnowledge*.

If not, you must disconnect the BioNomadix unit from the participant and calibrate it now before you proceed.

1. Access the `CIP1_F15` lab log on the Lenovo laptop or your own device (as the *AcqKnowledge* computer must have wifi turned off).
2. Press **Continue** on the *AcqKnowledge* pop-up to begin recording recording data.
3. Monitor the data recording in *AcqKnowledge* for 30 seconds to make sure it is collecting properly (when in doubt, refer to the BIOPAC Manual).
4. Advance the SuperLab stimulus by pressing the space bar.

**Note that when the stimulus is advanced, there will be no visual change. It will play a sound check through the speakers. Do not press space twice.**

After Superlab is advanced, the participant will be prompted by the sound check to take a deep breath. This should stimulate an EDA event. If the participant does not appear to experience an EDA event during the sound check, make a note in the lab log.

5. After the first set of videos ends and the instruction screen appears, peek through the blinds to make sure that the participant is answering the Qualtrics survey on the laptop. When they are finished (the laptop lid is pushed down and the bell is rung), advance the stimulus by pressing the space bar on the SuperLab iMac.
6. Repeat step 5 after the second set of videos
7. **DISCUSSION STIMULUS**

- a. The participant thinks that they are preparing for a political conversation. Give them until the end of the stimulus to prepare.
- b. After the stimulus, knock on the door, enter the room, close the door after you, and perform the deception according to the following script:
  - So... it turns out that your discussion partner never showed up.

- Normally, the discussion is the last part of the lab session, but we did this study last year, and unfortunately we had enough no-shows that we knew we needed a backup plan going forward.
  - So instead of having the discussion, the last part of your lab session will be this extra portion of the survey I'm going to pull up on the laptop.
- c. Open the laptop and click through the question that comes up asking whether the discussion partner showed up.
  - d. Leave the room while they complete the survey.
8. Between lying and debriefing, while the participant is doing the last Qualtrics section:
    - a. Save the *AcqKnowledge* graph as both `rawXXXXX(problem).acq` and `rawXXXXX(problem).txt`
      - `raw` indicates that the file has not yet undergone any postprocessing.
      - `XXXXX` should be replaced by the participant's ID number.
      - `(problem)` should be replaced with text describing the nature of any glaring problems about the data or the session only if there is one. A non-problematic session should look like `raw12345.acq`, whereas one in which the EDA failed might look like `raw12345badEDA.acq`.
      - The file should be saved as both a `.acq` and `.txt` file (these are options in the save dialog box).
    - b. Fill out the Compensation Tracking Form for the participant's monetary compensation, and prepare a Receipt Form, Debriefing Form, and a 10 dollar bill for the debriefing.
    - c. If there is time, prepare a new graph for the next participant.
  9. When the old participant is finished with Qualtrics and has rung the bell, enter the Participant Room (with the forms and money) and turn the light on.
  10. Verify that the lab survey has been submitted.
  11. Remove the sensors from the participant.
    - Throw electrodes away
    - Offer the participant a wipe for the electrode gel on their fingers.
    - Turn the sensor off with the switch on the side
  12. Walk the participant to the debriefing room, close the door, and debrief them according to the checklist.

The checklist is reproduced and elaborated below:

1. **Debriefing form** – Give the participant a debriefing form to read. Allow them to keep it if they request it, but do not offer.
2. **Reveal the deception** – Explain that the discussion was never intended to occur.

3. **Did they suspect?** – Ask them whether they doubted the deception.
  4. **When** – If they did suspect, ask whether it occurred:
    1. **during the stimulus**
    2. **during the proctor lie**
    3. **during the final survey**
  5. **Ask them to keep our secret** – Ask them not to reveal the deception to anyone. Reference the honor code to hammer the point home.
  6. **Offer informed consent form** – Offer them a blank copy to take home.
  7. **Allow questions** – Let them ask any questions they may have. Keep your answers vague. Refer to the sample answers below when possible.
  8. **Compensate them** – Fill out the Compensation Tracking Form, have them sign the Receipt Form, and give them their 10 dollars.
  9. **Thank them** – Let them know we appreciate what they’ve done for science.
13. Check whether the next participant has already arrived before leaving the debriefing room, to ensure nothing sensitive gets said after you leave the debriefing room.

#### Between Participants:

1. Make sure previous *AcqKnowledge* recording was saved with `rawXXXXX(problem).acq` and `rawXXXXX(problem).txt` formats using their 5-digit unique subject ID).
2. Fill out and submit the lab log for the last participant.
3. Wipe down headphones, mouse, keyboard, and bell.
4. Make sure fresh electrodes are laid out and haven’t dried out.
5. Pull up new lab survey on participant laptop.
6. Check if laptop cart needs to be switched for handedness of next participant.
7. Check if speakers need to be used instead of headphones. Run sound check if so.
8. Pull up SuperLab for next participant.
9. Open new *AcqKnowledge* Graph (having already saved the old one with `rawXXXXX(problem).acq` and `rawXXXXX(problem).txt` formats using their 5-digit unique subject ID).
10. Fill out and submit lab log for old participant.
11. Open new lab log, fill out the initial parts for next participant.

#### Lab Log:

After debriefing the old participant and saving their *AcqKnowledge* recording, complete the Lab Log for the old participant. (For the last participant of the day, fill it out as soon as they leave.)



- **During the lab session, try to note building noise in the lab log as it happens. You won't remember later.**
- If there are multiple proctors, all of them should confer to ensure everything makes it to the lab log.
- It is important you do this as soon as possible after the subject leaves so that you don't forget any pertinent detail. No detail is too small to note.

#### **At the End of the Day:**

1. File all of the day's paperwork (daily schedule, informed consent forms, compensation receipt forms) in the labeled folders in the bottom drawer of the filing cabinet in the Participant Room.
2. Backup:
  - a. that day's *AcqKnowledge* data to the external hard drive.
  - b. that day's Qualtrics surveys to the external hard drive.
    - Download the results of both the lab log and the lab survey from Qualtrics as *.csv* files.
    - Save lab logs in the format *11\_mm.dd.yyyy.csv*.
    - Save lab surveys in the format *1s\_mm.dd.yyyy.csv*.
3. At the end of each week, back up all data for the week to the *govtomni* shared drive.
  - Copy all *AcqKnowledge* files for the week to the drive.
  - Save that week's survey data to the drive.
    - Download the week's data for both the lab log and lab survey from Qualtrics.
    - Save lab log data in the format *11\_mm.dd.yyyy-mm.dd.yyyy.csv*.
    - Save lab survey data in the format *1s\_mm.dd.yyyy-mm.dd.yyyy.csv*.
4. Shut everything down, including (but not limited to):
  - the BioNomadix sensor
    - Remember to charge the sensor!
  - the BIOPAC MP150 unit
  - both iMacs
  - the monitor
  - the sink
    - Refill the freshwater and/or empty the wastewater as needed.
  - the lights
5. Re-check inventory. Electrodes, informed consent forms, compensation receipt forms, compensation tracking forms, supply of 10 bills, and wipes.
  - When getting remotely low on anything, notify Professor Settle and John ASAP so that it can be restocked in time.
6. Wipe down headphones, laptop, mouse, bell, and other surfaces.

### Questions to Anticipate:

- What is the purpose of this study? **OR** Why do you want this data?
  - The purpose of this study is to investigate the physiological responses to viewing contentious video clips.
- Why was my discussion partner not there? What was the purpose?
  - This person was never going to be here. The purpose was to see the physiological response to anticipating a political discussion.
- Who else is participating in this study?
  - For confidentiality purposes, we can't tell you who else is participating or has participated in this study.
- What are you going to do with this information?
  - The information will be published in scholarly papers once all of the data has been properly analyzed.
- Can I see my scores?
  - Right now, none of the data has been analyzed and since your scores are tied to a subject number, there is no way for me to tell you exactly how you did.
- Can I get a copy of my results?
  - Due to confidentiality concerns, we are unable to produce individual reports.