Fall 2015 Omnibus Protocol

Contents

1 Perpetual Maintenance

1.1 At the beginning of each week

Check to ensure that:

1. there are plenty of consent forms debriefing 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 and both EDA and ECG electrodes. 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.

1.2 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 aren't distracted by the window, especially once lights in the Participant Room are turned off.

2 Protocol Structure

John is writing this part. The current draft is below.

Fall 2015 Omnibus Project

- 2 Protocols, 2 sets of Proctors
  - Protocol A: psychophysiology—sensors, visual stimuli presentation/discussion, web-based lab surveys

  - Protocol B: web-based lab surveys

- Proctor B will be responsible for Protocol B, and for secondary assistance on Protocol
- Overall responsibilities of Proctor B:
  - Pulling up lab surveys on computers in computer lab *Document emailed to you
  - Checking in and debriefing some of Protocol A participants

Proctoring Flow:

1. Ppant B's: Proctor B
   (Ppant B's take lab survey B)
2. Ppant A1: Proctor A
   (Ppant A1 does Stuart Study with Proctor A)
3. Ppant A2: Proctor B checks in
   (Ppants A1 and A2 do CIPI Study with Proctor A)
4. Ppant A1: Proctor B debriefs
   (Ppant A2: does Stuart Study with Proctor A)
5. Ppant A2: Proctor A debriefs
   (Proctoring flow cycle repeats as needed)

3 Protocol

3.1 Day Before Proctoring

1. Print two copies of the daily proctoring schedule for the next day and put them on the proctoring clipboards. The schedules should be posted in the `govtomni` drive, in the `Omnibus_Fall2015` 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 whether the first participant wears hearing aids that preclude the use of headphones. If so, set up the external speakers and run a sound check.
   b. Check that the chairs and table are positioned on the `Stuart` tape marks (blue painter's tape) on the floor.
   c. Check that all the cords are connected:
      - HDMI cable from SuperLab iMac to external monitor, through the wall

- Headphone extension cable to the SuperLab iMac, through the wall
- Webcam USB cable, through the wall.
- Two sets of ECG leads connected snugly to the extension cords, threaded through the wall.

d. Ensure the room looks tidy, and the trash can is not overfull.

4. Set up the debriefing (conference) room:

   a. Arrange chairs so the door can be closed.
   b. Check trash cans for excessive trash.

5. Check the water tank levels in the kitchen sink:

   - If the used water tank is full, empty it in the bathroom.
   - If the clean water tank is empty, fill it from the water fountain down the hall using the funnel inside the sink.
   - If you need to do either, use a rolling chair to move the tanks, since they are quite heavy when they're full.
   - **Be sure not to remove either tank while the sink is turned on.**

3.2 Before Participant 1 arrives

On the day of the study, before the first Participant 1 arrives:

1. Set up the debriefing (conference) room.

   - Arrange chairs so it looks organized and the door can be closed easily.
   - Check trash cans for excessive trash.
   - Ensure that the whiteboard is blank.

2. Check the water tank levels in the kitchen sink.

   - If the used water tank is full, empty it in the bathroom.
   - If the clean water tank is empty, fill it from the water fountain down the hall using the funnel inside the sink.
   - If you need to do either, use a rolling chair to move the tanks, since they are quite heavy when they're full.
   - **Be sure not to remove either tank while the sink is turned on.**

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 may make a loud noise at first, this is normal.
4. Set up the Participant Room.

   - Check the daily schedule for the first participant's audio information.

  - If the participant is unable to wear headphones due to hearing aids, turn on speakers.
  - Set the volume to either 13% (two notches) for headphones or 25% (four notches) for speakers.
  - Run a sound check (even with headphones).
- Clip the ECG leads numbered `1` to a set of cloth EL504 electrodes.
- Check to ensure all furniture is placed properly on the `Stuart` tape marks.
- Make sure the webcam is **not** set up for the CIPI Protocol and is not visible to the participant.

5. Set out necessary items in the lobby:
   - Informed Consent folder
     - enough Informed Consent forms for all of the day's participants
     - a pen or two
   - Debriefing Folder
     - 2 Debriefing forms
     - 2 Informed Consent forms
   - BioNomadix unit 2 – make sure the unit is turned on
   - 2 foam EL507 electrodes for each Participant 2
   - 3 cloth EL504 electrodes for each Participant 2
6. Open the Acq*Knowledge* graph template file `Omni_F15_Stuart.gtl` located at the bottom right corner of the desktop.
7. Calibrate the BioNomadix EDA sensor:
   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. Open the SuperLab stimulus file `Omnibus_F15.sl5`, located on the desktop.
   - Press the play button in the upper right hand corner of the SuperLab window.
   - Do not enter any information in the resulting pop-up window. **Make sure the `Save collected data` radio box is checked.** Press `Run`. Name the file `sl_XXXXX.YYYYY` and save it to the `Omni_F15_CIPI` folder.

   - `raw` indicates that the file is from SuperLab.
   - `XXXXX` is to be replaced with Participant 1's ID number.
   - `YYYYY` is to be replaced with Participant 2's ID number.

9. Open both the Stuart and CIPI lab logs, and fill out what you can from the daily schedule.

3.3 When Participant 1 first arrives 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 participant 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, forearm, and ankles, the removal of which isn't any worse than a Band-Aid.
    b. **view pictures and videos** – Explain they'll be shown some pictures and a few short video clips.
    c. **answer survey questions** – Explain that they'll be answering some survey questions.
    d. **have a discussion** - Explain that they'll have to have a discussion with another participant.
    e. **be recorded** - Explain that the discussion will be recorded.
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** – Unless they just used the bathroom, direct them to rinse their hands in the kitchen sink. Warn them that the sink is noisy.
8. **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.

3.4 Stuart Protocol for Participant 1

Acq*Knowledge* should already be set up, and calibrated, and you should see a pop-up from Acq*Knowledge* that reads "`Connect the EDA electrode leads`

`to the electrodes`." Do not click through yet.
If you do not see this pop-up, you must calibrate it now (as described in §3.2.8 above) before you proceed.

1. Once you've completed the check-in checklist, direct the participant to sit in the chair in the Participant Room.
2. Give the participant the Electrode Placement Handout and give them the choice of applying or having the proctor apply cloth EL504 electrodes to their arm and ankles according to the electrode handout:
   - Red – left ankle
   - Black – right ankle
   - White – right arm
3. Place foam EL507 electrodes on the index and middle fingers of the participant's non-dominant hand. To ensure good contact, rub the electrodes in.
4. Attach the BioNomadix unit as described in the BIOPAC Manual.
   a. Attach the BioNomadix unit to the wrist of the participant's non-dominant hand.
   b. Clip the EL507 electrodes on the participant's fingers to the BioNomadix unit's leads:
      - Black – index
      - Red – middle
5. Give the participant a brief overview of what they will be asked to do:
   a. Inform them that still images and videos and instructions will be presented on the monitor.
   b. Make sure they understand that there will be relatively long intervals in between these presentations, and that they should focus on the fixation cross.
   c. Explain that the lights will be shut off, and they will be given headphones, so that they are more immersed in the stimulus.
   d. Instruct them to sit back, relax, and limit their motion as much as possible, especially of their left arm, **including while nothing is on screen**.
   e. Instruct them to ring the bell if they have questions or problems.
   f. Remind them that they can cease their participation at any time with no penalty.
6. Hand the participants the headphones, and instruct them to put them on. Ask them to avoid using their electrode fingers.
7. Turn off the light and return to the Data Cave.
8. Press `Continue` on the Acq*Knowledge* pop-up to begin recording data.
9. Monitor the data recording in Acq*Knowledge* for approximately 30 seconds to make sure it is collecting properly

- EDA should be positive, usually between 5 and 20 mS. If it is negative, stop and recalibrate.
- Heart Rate should be probably be between 40 and 100 bpm. If it seems impossibly high (e.g. around 250 bpm), there is probably a connection problem with the electrodes.
- When in doubt about whether data is good, refer to the BIOPAC Manual.

10. 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 several seconds into the sound check, make a note in the lab log.
    - The SuperLab stimulus for the Stuart Protocol is completely automated from this point forward. Do not try to advance it manually. When it is finished, it will display instructions to the participant to wait for the proctor.
    - Should you encounter a problem that necessitates stopping the SuperLab stimulus before that point, press `Esc`. **Do not press `Yes` in the resulting pop-up.** Once the problem is dealt with, click `No` to resume the stimulus. If you paused the stimulus during a video, it will start from the beginning when you resume the stimulus.

11. While SuperLab is running, listen for building noise and note it in the lab log **as it happens**. You won't remember later.
    Record anything of note or which might be a problem in the lab log. Nothing is too small.
12. After the SuperLab stimulus is finished, stop the Acq*Knowledge* recording.

3.5 Between Stuart and CIPI Protocols

3.5.1 Proctor A

1. Open the `Omni_F15_CIPI.gtl` graph template located at the bottom right corner of the desktop. This will open a new tab in Acq*Knowledge*.
2. Press `Start` to begin calibration.
3. Click `OK` on the first pop-up. The BioNomadix unit is already on.
4. Re-enter the Participant room and start to detach the sensors from the participant.

    - Take the participant's headphones.
    - Unhook Participant 1 from the ECG leads.

- Unhook one EDA lead.

5. Go back to the Data Cave and click `Calibrate` on the second pop-up.
6. Return to the participant, re-attach the EDA lead, and send them out into the lobby.
   Proctor B will direct them to take a survey in the computer lab and wait in the conference room when they're done.
7. Rearrange the Participant room for the `CIPI` protocol.
   - Uncover the motion sensor on the light switch.
   - Move the chairs and table to the `CIPI` tape marks (white masking tape).
   - Place ECG leads numbered `1` on the left-hand chair and ECG leads numbered `2` on the right-hand chair.
   - Set up the webcam.
   - Wipe down the headphones.
8. Click `Continue` in Acq*Knowledge* to complete calibration. Recording will not begin because there is still a BioNomadix unit yet to be calibrated. You should be presented with another set up pop-ups.
9. Click `OK` and `Calibrate`, respectively, on the next two pop-ups. **Do not click continue on the final pop-up. Recording will begin immediately after it is clicked.**
10. Advance SuperLab. It should now read "**Welcome**."
11. Complete and submit the `Stuart` Lab Log and ensure that the `CIPI` lab log is open.
12. Start the webcam recording:
    1. Open QuickTime.
    2. From the menu bar, select `File`, then `New Movie Recording`.
    3. Mouse over the new QuickTime window. Next to the red `Record` button, there should be a downward facing caret (∨). Click it, and ensure that `HD Pro Webcam C920` is selected for both the `Camera` and `Microphone` fields, and that `Maximum` is selected for the `Quality` field.
    4. Press the `Record` button to begin the recording.

3.5.2 Proctor B

While you set up for the Data Cave and Participant room for the CIPI protocol, Proctor B will prepare Participant 2, who should be arriving at about this time.

Proctor B will follow the separate Participant 2 Check-In Checklist that is provided (which differs slightly from the Participant 1 Check-In Checklist discussed above).
That checklist is reproduced and elaborated here:

1. **Arrival time if waiting** – If Proctor B is unable to immediately begin this checklist, they will write down the participant's time of arrival on the daily participant list, then write down the time when they begin.

2. **Informed consent form** – They will have the participant sign the form, and put it in the manila folder. While they do, they will give them an overview:
    a. **hooking up to equipment** – They will explain that we'll be attaching a couple of electrodes to the participant's fingers, wrist, and ankles, the removal of which isn't any worse than a Band-Aid.
    b. **view pictures and videos** – They will explain that they'll be shown some pictures and a few short video clips.
    c. **answer survey questions** – They will explain that they'll be answering some survey questions.
    d. **have a discussion** - They will explain that they'll have to have a discussion with another participant.
    e. **be recorded** - They will explain that the discussion will be recorded.
3. **Chewing gum** – They will ask if the participant is chewing gum, and if so, have them dispose of it.
4. **Cell phone** – If the participant have one with them, they will ask them to turn it off. They will inform them that having it go off, even on vibrate, can damage the data we collect.
5. **Jewelry/watch removal** – They will ask the participant to remove all jewelry on their wrists and hands.
6. **Bathroom** – They will inform the participant that if they need to use the bathroom, now is the time. If they do go, they will note it for the lab log since (presumably) the participant will wash their hands with soap.
7. **Rinse hands** – Unless they just used the bathroom, they will direct the participant to rinse their hands in the kitchen sink. They will warn them that the sink is noisy.
8. **Electrodes** - They will give the participant the Electrode Placement Handout and give them the choice of applying or having them apply cloth EL504 electrodes on their ankles and forearm according to the diagrams. They will also apply foam EL507 electrodes to the participant's left index and middle fingers.
9. **BioNomadix** - They will strap the BioNomadix unit 2 to the participant's left wrist and attach one of the leads to an electrode on the participant's finger.
10. **Notes for lab log** – If there are any abnormalities, or the participant seems agitated, or out of breath, they will make a note and give it to you (Proctor A) once the `CIPI` Protocol begins.

3.6 CIPI Protocol

3.6.1 Proctor A

1. Once you have set up the rooms and Proctor B has prepared Participant 2, bring both participants into the Participant Room.

2. Attach the ECG electrodes to each participant.
3. Attach the BioNomadix unit on Participant 2 to the final electrode.
4. Explain the protocol:
    a. Inform them that instructions will be presented on the monitor.
    b. Make sure they understand that there will be relatively long intervals in between these presentations, and that they should focus on the fixation cross.
    c. Instruct them to sit back, relax, and limit their motion as much as possible, especially of their left arm, **including while nothing is on screen**.
    d. Instruct them to ring the bell if they have questions or problems.
    e. Remind them that they can cease their participation at any time with no penalty.
5. Return to the Data Cave and press `Continue` in Acq*Knowledge* to begin recording.
6. Monitor the data recording in Acq*Knowledge* for approximately 30 seconds to make sure it is collecting properly
    - EDA should be positive, usually between 5 and 20 mS. If it is negative, stop and recalibrate.
    - Heart Rate should be probably be between 40 and 100 bpm. If it seems impossibly high (e.g. around 250 bpm), there is probably a connection problem with the electrodes.
    - When in doubt about whether data is good, refer to the BIOPAC Manual.
7. Advance the SuperLab stimulus by pressing the space bar.
    - After Superlab is advanced, the participants will be prompted by the stimulus to take a deep breath. This should stimulate an EDA event. If a participant does not appear to experience an EDA event several seconds into the sound check, make a note in the lab log.
    - The SuperLab stimulus for the CIPI Protocol is completely automated from this point forward. Do not try to advance it manually. When it is finished, it will display instructions to the participant to wait for the proctor.
    - Should you encounter a problem that necessitates stopping the SuperLab stimulus before that point, press `Esc`. **Do not press `Yes` in the resulting pop-up.** Once the problem is dealt with, click `No` to resume the stimulus.
8. Without stopping the currently recording Acq*Knowledge* recording, navigate to the tab containing the `Stuart` Protocol recording for Participant 1. Save it now.
   The graph should be saved as `rawXXXXX(problem).acq` and `rawXXXXX(problem).txt` to the `Omni_F15_Stuart` folder.
    - `raw` indicates that the file has not yet undergone any post-processing.

- `XXXXX` is to be replaced with 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 in 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 `.acq` and `.txt` files (these are options in the save dialog box).

9. While SuperLab is running, fill out the lab log. Listen for building noise and note it in the lab log **as it happens**. You won't remember later. Record anything of note or which might be a problem. Nothing is too small.
10. After the SuperLab stimulus is finished, stop the Acq*Knowledge* recording.
11. Re-enter the Participant Room. Unhook both participants from the ECG leads and take their BioNomadix units. Do not remove their electrodes.
12. Send them out into the lobby, where Proctor B will take over and lead them to fill out the lab survey in the computer lab.

3.6.2 Proctor B

While

Prepare laptops

Have them take the survey

Direct them where to wait when they finish

debrief p1 when they finish

Write this in...

3.7 Between CIPI and Stuart Protocols

1. Stop the QuickTime recording and save it as `XXXXX.YYYYY.mov`.
   - `XXXXX` is to be replaced with the participant ID of Participant 1.
   - `YYYYY` is to be replaced with the participant ID of Participant 2.
   - `.mov` is the default file format for QuickTime.
2. Save the CIPI Acq*Knowledge* recording in `rawXXXXX.YYYYY(problem).acq` and `rawXXXXX.YYYYY(problem).txt`.
   - `raw` indicates that the file has not yet undergone any post-processing.
   - `XXXXX` is to be replaced with the participant ID of Participant 1.
   - `YYYYY` is to be replaced with the participant ID of Participant 2.
   - `(problem)` should be replaced with text describing the nature of any glaring problems about the data or the session only if there in one. A non-problematic session should look like

`raw12345.54321.acq`, whereas one in which the EDA failed might look like `raw12345.54321badEDA.acq`.
- The file should be saved as both `.acq` and `.txt` files (these are options in the save dialog box).

3. Open the `Omni_F15_Stuart.gtl` template and calibrate.
   - Press `OK` on the first pop-up; the unit is already turned on.
   - Press `Calibrate`; the unit already has leads attached and is not attached to a participant.
   - **Do not press `Continue` yet. Recording will begin immediately after `OK` is pressed.**
4. Complete and submit the lab log for the CIPI Protocol.
5. Open the `Stuart` lab log for Participant 2, and fill out what you can from the daily schedule.
6. Set up the Participant Room.
   - Check the daily schedule for Participant 2's audio information.
     - If the participant is unable to wear headphones due to hearing aids, turn on speakers.
     - Set the volume to either 13% (two notches) for headphones or 25% (four notches) for speakers.
   - Make sure fresh electrodes are laid out and haven't dried out.
   - Clip the ECG leads numbered `1` to a set of cloth EL504 electrodes.
   - Rearrange all furniture in accordance with the `Stuart` tape marks.
   - Take down the webcam and store it behind the monitor. Make sure it is not visible to the participant.

3.8 Stuart Protocol for Participant 2

Acq*Knowledge* should already be set up, and calibrated, and you should see a pop-up from Acq*Knowledge* that reads "`Connect the EDA electrode leads to the electrodes`." Do not click through yet.
If you do not see this pop-up, you must calibrate it now (as described in §3.7.5) before you proceed.

1. Once you've set up the room and Participant 2 has completed the lab survey, direct them to sit in the chair in the Participant Room.
2. Give them the option of clipping or having you clip the ECG leads (numbered `1`) to the electrodes on their ankles and arm.
3. Attach BioNomadix unit 1 as described in the BIOPAC Manual.
   a. Attach the BioNomadix unit to the participant's non-dominant wrist.
   b. Clip the EL507 electrodes on the participant's hand to the BioNomadix unit's leads:
      - Black – index

- Red – middle

4. Give the participant a brief overview of what they will be asked to do:
    a. Inform them that still images and videos and instructions will be presented on the monitor.
    b. Make sure they understand that there will be relatively long intervals in between these presentations, and that they should focus on the fixation cross.
    c. Explain that the lights will be shut off, and they will be given headphones, so that they are more immersed in the stimulus.
    d. Instruct them to sit back, relax, and limit their motion as much as possible, especially of their left arm, **including while nothing is on screen**.
    e. Instruct them to ring the bell if they have questions or problems.
    f. Remind them that they can cease their participation at any time with no penalty.
5. Hand the participants the headphones, and instruct them to put them on. Ask them to avoid using their electrode fingers.
6. Turn off the light and return to the Data Cave.
7. Press `Continue` on the Acq*Knowledge* pop-up to begin recording data.
8. Monitor the data recording in Acq*Knowledge* for approximately 30 seconds to make sure it is collecting properly
    - EDA should be positive, usually between 5 and 20 mS. If it is negative, stop and recalibrate.
    - Heart Rate should be probably be between 40 and 100 bpm. If it seems impossibly high (e.g. around 250 bpm), there is probably a connection problem with the electrodes.
    - When in doubt about whether data is good, refer to the BIOPAC Manual.
9. 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 several seconds into the sound check, make a note in the lab log.
    - The SuperLab stimulus for the Stuart Protocol is completely automated from this point forward. Do not try to advance it manually. When it is finished, it will display instructions to the participant to wait for the proctor.
    - Should you encounter a problem that necessitates stopping the SuperLab stimulus before that point, press `Esc`. **Do not press `Yes` in**

the resulting pop-up. Once the problem is dealt with, click `No` to resume the stimulus. If you paused the stimulus during a video, it will start from the beginning when you resume the stimulus.

10. While SuperLab is running, listen for building noise and note it in the lab log **as it happens**. You won't remember later.
    Record anything of note or which might be a problem in the lab log. Nothing is too small.
11. After the SuperLab stimulus is finished, stop the Acq*Knowledge* recording.

3.9 After Stuart Protocol

1. 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
2. Walk Participant 2 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. **Ask them not to talk about us** – Ask them not to reveal anything about the study to other people in Omnibus classes.
   3. **Offer informed consent form** – Offer them a blank copy to take home.
   4. **Allow questions** – Let them ask any questions they may have. Keep your answers vague. Refer to the sample answers below when possible.
   5. **Thank them** – Let them know we appreciate what they've done for science and that they'll get their class credit.
3. Check whether the next Participant 1 has already arrived before leaving the debriefing room, to ensure nothing sensitive gets said after you leave the debriefing room.
4. Save the Stuart Acq*Knowledge* recording.
   The graph should be saved as `rawXXXXX(problem).acq` and `rawXXXXX(problem).txt` to the `Omni_F15_Stuart` folder.
   - `raw` indicates that the file has not yet undergone any post-processing.
   - `XXXXX` is to be replaced with 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 in 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 `.acq` and `.txt` files (these are options in the save dialog box).

5. Press `space` to exit the completed SuperLab stimulus.
6. Complete and submit the `Stuart` Lab Log.

3.10 Between Participant 2 and the Next Participant 1

1. Open the Acq*Knowledge* graph template file `Omni_F15_Stuart.gtl` located at the bottom right corner of the desktop.
2. Calibrate the BioNomadix EDA sensor:
    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.**
3. Begin the SuperLab stimulus again.
    - Press the play button in the upper right hand corner of the SuperLab window.
    - 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`.
4. Open new Stuart and CIPI lab logs, and fill out what you can from the daily schedule.
5. Set up the Participant Room.
    - Check the daily schedule for the first participant's audio information.
        - If the participant is unable to wear headphones due to hearing aids, turn on speakers.
        - Set the volume to either 13% (two notches) for headphones or 25% (four notches) for speakers.
        - Run a sound check (even with headphones).
    - Clip the ECG leads numbered `1` to a set of cloth EL504 electrodes.
    - Check to ensure all furniture is placed properly on the `Stuart` tape marks.

When the next Participant 1 arrives, restart the protocol from §3.2.

3.11 At the End of the Day

1. File all of the day's paperwork (daily schedules and informed consent forms) in the labeled folders in the bottom drawer of the filing cabinet in the Participant Room.

2. Backup:
    a. that day's Acq*Knowledge* data to the external hard drive.
    b. that day's Qualtrics surveys to the external hard drive.
        - Download the results of both lab logs and the lab survey from Qualtrics as `.csv` files.
        - Save Stuart lab logs in the format `stuart.MM.DD.YY.csv`.
        - Save CIPI lab logs in the format `cipi.MM.DD.YY.csv`.
        - Save lab surveys in the format `ls.MM.DD.YY.csv`.
3. At the end of each week, back up all data for the week to the `govtomni` shared drive.
    - Copy all Acq*Knowledge* 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 `LL.MM.DD.YY-MM.DD.YY.csv`.
        - Save lab survey data in the format `LS.MM.DD.YY-MM.DD.YY.csv`.
4. Shut everything down, including (but not limited to):
    - the BioNomadix units
        - Remember to charge the sensors!
    - 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, 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 and other surfaces.

Appendices

A In Case of Vomit

John's protocol involves disgusting stimuli. Participants will be disgusted. They may vomit. Should they vomit:

1. Tell the participant you are on your way. Urge them not to move around much.
   If they do move around, vomit is likely to get on more things.

2. Put on nitrile gloves and grab the exterior key **before** entering the Participant Room.
3. Disconnect the ECG leads from the extension cord *before* touching anything else in the room.
   Un-clip the leads from the electrodes, and place them on the floor.
4. Disconnect the BioNomadix unit from the participant.
   Place it on the floor.
5. Take the participant's headphones and place them on the floor.
6. Give the participant the key and send them to the restroom to clean up.
7. Put down vomit powder on any cloth surfaces affected.
8. Use the surface wipes to clean any equipment affected. Leave all equipment on the floor in the Participant Room.
9. Take off your gloves and place them in a sealed plastic bag (available in the kitchen).
10. Place an **emergency** clean up request here: http://www.wm.edu/offices/facilities/workorders
11. When the participant returns:
    a. If the participant is a Participant 1 **and** they managed to not vomit on their clothes, beg them to stay, and promise them that the next portion is not disgusting.
    b. Otherwise, if the participant is a Participant 2 or they vomited on themselves, offer them a debriefing and let them go. Apologize profusely and thank them for their participation.
12. Notify Professor Settle and John if a participant does vomit.

Depending on the response time of the clean-up crew (and whether or not the participant opts to stay), you may have to cancel subsequent sessions. Do so only if you have to.

B Proctor B Instructions

John is writing this part. The current draft is below.

1. Initial set up for day's proctoring (separate checklist)
   a. Daily schedule for Participant A's and Participant B's
   b. Informed consent forms in folders for both protocols
   c. Debriefing folder/forms for Protocol A
2. Setting up Protocol B lab surveys

3. Checking-in Ppant B's
    a. Making sure lab surveys are fully submitted after Ppant B's are done.

Protocol A Participants:

4. Setting up lab surveys for Protocol A ppants
5. Checking in Ppant A2, sending them to take first part of lab survey
    a. If Ppant A2 completes the lab survey before Proctor A is ready for them, have them wait in lobby
6. Sending Ppant A1 to do first part of lab survey (at correct computer)

a. Putting Ppant A1 in conference room once they've completed lab survey

(Protocol A participant pair have discussion, then take second part of lab survey.)

7. Make sure Protocol A lab surveys have been submitted once completed
8. Ppant A1 electrode removal
9. Debrief Ppant A1

(Back to Protocol B, step (2.) above.)

C Beginning of Day Checklist

This is just held over. Edit soon.

1. BioNomadix charged?
2. Daily schedule copies
3. Debriefing room
    - chairs
    - trash cans
    - White board blank
4. Kitchen sink
5. Subject room
    - positioning on `Stuart` tape marks
    -
6. SuperLab
7. Lab log

D Participant 1 Check-In Checklist

1. Arrival time if waiting
2. Informed consent form
    a. hooking up to equipment
    b. view pictures and videos
    c. answer survey questions
    d. have a discussion
    e. be recorded
3. Chewing gum
4. Cell phone
5. Jewelry/watch removal
6. Bathroom
7. Rinse hands
8. Mental notes for lab log

E Participant 2 Check-In Checklist

1. Arrival time if waiting
2. Informed consent form
    a. hooking up to equipment
    b. view pictures and videos
    c. answer survey questions
    d. have a discussion
    e. be recorded
3. Chewing gum
4. Cell phone
5. Jewelry/watch removal
6. Bathroom
7. Rinse hands
8. Electrodes
9. BioNomadix
10. Notes for lab log

F Beginning Proctoring Session Checklist

1. ECG electrodes
2. EDA electrodes
3. BioNomadix unit(s)
4. Overview:
    a. stimulus overview
    b. ISIs

c. (headphones & lights)
d. be still
e. bell
f. permission to leave

5. (headphones & lights)

G Debriefing Checklist

1. Debriefing form
2. Ask them not to talk about us
3. Offer informed consent form
4. Allow questions
5. Thank them

H Stuart to CIPI Transition Checklist

This is the *whole* relevant section from the protocol. Cut down soon.

1. Open the `Omni_F15_CIPI.gtl` graph template located at the bottom right corner of the desktop. This will open a new tab in Acq*Knowledge*.
2. Press `Start` to begin calibration.
3. Click `OK` on the first pop-up. The BioNomadix unit is already on.
4. Re-enter the Participant room and start to detach the sensors from the participant.
   - Take the participant's headphones.
   - Unhook Participant 1 from the ECG leads.
   - Unhook one EDA lead.
5. Go back to the Data Cave and click `Calibrate` on the second pop-up.
6. Return to the participant, re-attach the EDA lead, and send them out into the lobby.
   Proctor B will direct them to take a survey in the computer lab and wait in the conference room when they're done.
7. Rearrange the Participant room for the `CIPI` protocol.
   - Uncover the motion sensor on the light switch.
   - Move the chairs and table to the `CIPI` tape marks (white masking tape).
   - Place ECG leads numbered `1` on the left-hand chair and ECG leads numbered `2` on the right-hand chair.
   - Set up the webcam.
   - Wipe down the headphones.

8. Click `Continue` in Acq*Knowledge* to complete calibration. Recording will not begin because there is still a BioNomadix unit yet to be calibrated. You should be presented with another set up pop-ups.
9. Click `OK` and `Calibrate`, respectively, on the next two pop-ups. **Do not click continue on the final pop-up. Recording will begin immediately after it is clicked.**
10. Advance SuperLab. It should now read "**Welcome**."
11. Complete and submit the `Stuart` Lab Log and ensure that the `CIPI` lab log is open.
12. Start the webcam recording:
    1. Open QuickTime.
    2. From the menu bar, select `File`, then `New Movie Recording`.
    3. Mouse over the new QuickTime window. Next to the red `Record` button, there should be a downward facing caret (∨). Click it, and ensure that `HD Pro Webcam C920` is selected for both the `Camera` and `Microphone` fields, and that `Maximum` is selected for the `Quality` field.
    4. Press the `Record` button to begin the recording.

I CIPI to Stuart Transition Checklist

This is the *whole* relevant section from the protocol. Cut down soon.

1. Stop the QuickTime recording and save it as `XXXXX.YYYYY.mov`.
   - `XXXXX` is to be replaced with the participant ID of Participant 1.
   - `YYYYY` is to be replaced with the participant ID of Participant 2.
   - `.mov` is the default file format for QuickTime.
2. Save the CIPI Acq*Knowledge* recording in `rawXXXXX.YYYYY(problem).acq` and `rawXXXXX.YYYYY(problem).txt`.
   - `raw` indicates that the file has not yet undergone any post-processing.
   - `XXXXX` is to be replaced with the participant ID of Participant 1.
   - `YYYYY` is to be replaced with the participant ID of Participant 2.
   - `(problem)` should be replaced with text describing the nature of any glaring problems about the data or the session only if there in one. A non-problematic session should look like `raw12345.54321.acq`, whereas one in which the EDA failed might look like `raw12345.54321badEDA.acq`.
   - The file should be saved as both `.acq` and `.txt` files (these are options in the save dialog box).
3. Open the `Omni_F15_Stuart.gtl` template and calibrate.
   - Press `OK` on the first pop-up; the unit is already turned on.

- Press `Calibrate`; the unit already has leads attached and is not attached to a participant.
- **Do not press `Continue` yet. Recording will begin immediately after `OK` is pressed.**

4. Complete and submit the lab log for the CIPI Protocol.
5. Open the `Stuart` lab log for Participant 2, and fill out what you can from the daily schedule.
6. Set up the Participant Room.
    - Check the daily schedule for Participant 2's audio information.
        - If the participant is unable to wear headphones due to hearing aids, turn on speakers.
        - Set the volume to either 13% (two notches) for headphones or 25% (four notches) for speakers.
    - Make sure fresh electrodes are laid out and haven't dried out.
    - Clip the ECG leads numbered `1` to a set of cloth EL504 electrodes.
    - Rearrange all furniture in accordance with the `Stuart` tape marks.
    - Take down the webcam and store it behind the monitor. Make sure it is not visible to the participant.

J Stuart to Stuart Transition Checklist

This is the *whole* relevant section from the protocol. Cut down soon.

1. Open the Acq*Knowledge* graph template file `Omni_F15_Stuart.gtl` located at the bottom right corner of the desktop.
2. Calibrate the BioNomadix EDA sensor:
    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.**
3. Begin the SuperLab stimulus again.
    - Press the play button in the upper right hand corner of the SuperLab window.
    - 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`.

4. Open new Stuart and CIPI lab logs, and fill out what you can from the daily schedule.
5. Set up the Participant Room.
    - Check the daily schedule for the first participant's audio information.
        - If the participant is unable to wear headphones due to hearing aids, turn on speakers.
        - Set the volume to either 13% (two notches) for headphones or 25% (four notches) for speakers.
        - Run a sound check (even with headphones).
    - Clip the ECG leads numbered `1` to a set of cloth EL504 electrodes.
    - Check to ensure all furniture is placed properly on the `Stuart` tape marks.

When the next Participant 1 arrives, restart the protocol from §3.2.

K End of Day Checklist

This is a hold-over. Edit soon.

1. Turn off and charge BioNomadix sensors
2. Backup
    - AcqKnowledge
    - Qualtrics surveys
3. End of week: shared drive backup
4. Shut everything down, including monitor
5. Turn off sink
    - empty or fill tanks if needed
6. Check quantity of:
    - electrodes
    - informed consent forms
    - wipes
7. Wipe down:
    - headphones
    - laptop
    - mouse
    - bell
    - other surfaces

L 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 emotionally evocative video clips.
- 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 used in completing an honors thesis, and potentially 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 participant 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.