# Scheduling

* When adding timeslots on SONA, make sure they don’t overlap with another researcher
* Participants **must be registered on SONA** in order to be enrolled
* If a participant cancels on SONA, reassign their subject ID to another participant
* When participant registers:
  + **Book them on the Bear Den Calendar and Study Calendar**
    - The name of the calendar event is the subject ID. The name of the lead experimenter should be in the description.
  + **Enter participant name and a new study ID** **in *Saliva Study/Subjects/Saliva\_IDs*** (password for document is same as pin to get into the lab)
  + **Create participant in Redcap**
  + Send scheduling email(s) **in SONA** (you can schedule ahead of time)
    - Thank you for registering for 'Physiology of Emotional Reactivity’. You have scheduled your session for [date and time] at [location]. Please note that, as part of this study, a researcher will ask to place electrodes on your chest and stomach. Therefore, **we ask that you wear loose, comfortable clothing**. We also recommend that you **shave any** **thick hair** you may have on your chest or stomach. **In order to participate in the full study, you must not have been ill or taken antibiotics or antifungals for 30 days prior to your appointment.** If you would like to request that a researcher of a certain gender place the electrodes for you, please let us know as soon as possible. If for any reason, you are no longer able to make it to your appointment, please let us know as soon as possible by replying to this email. Warmly, BAB Lab.
  + 1 week before appointment
    - Thank you for registering for 'Physiology of Emotional Reactivity’. This is a reminder that your session is scheduled for [date and time] at [location]. Please remember to wear **loose, comfortable clothing**, so that the researcher can place electrodes on your chest and stomach. We recommend that you **shave any** **thick hair** you may have on your chest or stomach. We are looking forward to seeing you at your appointment. Warmly, BAB Lab.
  + 1 day before appointment
    - Thank you for registering for 'Physiology of Emotional Reactivity’. This is a reminder that your session is scheduled for tomorrow at [time] at [location]. Please remember to **wear loose, comfortable clothing.** It may also be helpful to **shave any thick hair** you may have on your chest or stomach. Pritzker Hall is located next to Franz Hall and the Inverted Fountain. When you enter the building, take the elevator to the 5th floor and exit left. The Brain and Body Lab will be on your right, in room 5581. If you have any issues finding this location, please respond to this email. We are looking forward to seeing you tomorrow. Warmly, BAB Lab.
  + Rescheduling email
    - Thank you for letting us know that you need to reschedule. We can reschedule for [alternative time(s)]. Please let us know what works for you. Warmly, BAB Lab.
  + No-show email (15+ minutes late)
    - We missed you for your scheduled appointment with 'Physiology of Emotional Reactivity’ today at [time]. We hope that you are able to reschedule with us. Would you be available for any of these alternative times? [list alternative times]. Please let us know what works for you. Warmly, BAB Lab.
    - **Mark the participant as no-show on SONA and do not grant credit**
    - If no response within 48 hours, reassign their subject ID

# Session Prep

* Plan to take about 15 minutes to set up
* Avoid wearing any strong perfumes/scents, make sure to wear long pants and closed toes shoes, tie back long hair, etc.
* Make sure area is clean
* Make sure “Quiet” signs are up around the lab
* Prepare equipment
  + Abrasive gel (for abrading the skin where electrodes will go)
  + Green electrode gel (for establishing good contact between electrode and skin)
  + EDA electrode gel, 0.4ml measured out in a syringe
  + Electrodes
  + Tissues
  + Q-tips
  + Medical tape
  + Keypad
  + Bionomadix belts (charged) and cables
  + Scale and measuring tape
  + Saliva tube labeled with participant ID
* The participant computer keyboard should be on your table.
* Prepare redcap questionnaires on the iPad (record status dashboard -> saliva\_## -> microbiome metadata -> open as survey)
  + If iPad not available, use participant computer (computer on the right of the room)
* Open Psychopy and the task, **Saliva\_Study.psyexp** on the participant computer and close the readme; minimize the window
  + Saliva Study -> Task > Saliva\_Study.psyexp
* Prepare body measurements redcap form on the experimenter computer/your own device
* Prepare paper consent form & pen
* Prepare paper debrief form
* Turn on white noise machine
* Make sure your phone is turned off or on silent

# Session

* **Always** keep session notes in the Body Measurements comments, even if it’s just “session went great”
* Greet the participant and make sure they are wearing loose clothing, not visibly sick, etc
  + If they are wearing clothing that is too tight or a dress, offer to have them change into the spare clothes we have in the bottom drawer in the Bear Den
* Have the participant read over the **consent form** and sign it when they’re ready. Answer any questions they may have. If you are not sure, say you’re not sure. Make sure they have **printed and signed** their name and dated the form.
* Ask them when their **last food or drink** was (including water)
* Ask them not to consume food or drink (including water) for the next 30 minutes until the saliva sample.
* Administer **questionnaires** using the iPad. If they ask you a question that is not a definition of a word or something that is already answered in the form’s instructions, just tell them to answer as best as they can.
* If they report taking antibiotics, antifungals, or probiotics it will prompt them to let you know. If they are taking antibiotics or antifungals (except topical) DISCONTINUE the session. If they are taking probiotics they are ok to continue.
* **Body measurements**
  + Have them remove shoes and step on scale
  + Have them stand under the hanging measuring tape for height
  + For waist, you can measure over a t shirt, but not thick clothing like a sweater. Hold the tape horizontally at the belly button, snug but not tight. Have them breathe in and take the measurement just as they breathe out.
* If it still hasn’t been 30 minutes since last food or drink, you can wait to administer the saliva sample until after electrodes are attached.
* Using the instructions on the kit, collect the **saliva sample**.
  + Make sure the stabilizing solution is released fully – do not vigorously shake it at this point, although you can gently tap the cap if the stabilizing solution is not releasing well
  + Then, replace the large cap with the smaller cap
  + **Make sure the cap is screwed on tight** – it should be as tight as it can possibly be
  + Once the smaller cap is screwed on very tightly, vigorously shake the sample for 10 seconds
* **Before attaching electrodes**, advise the participant to stretch, use the bathroom, etc. if they need to
* Put on gloves
* **Attach electrodes**
  + Apply the white EDA electrode gel to 2 electrodes (0.2ml each) and place on the palm of the participant’s non-dominant hand (see diagram in appendix). Tape the electrodes down.
  + Ask the participant if they have sensitive skin; if so, DO NOT abrade in the next step, just use a baby wipe to clean the skin.
  + Use the abrasive gel and a Q-tip to abrade 2” below the participant’s left ribs and on their right and left collarbones until the skin turns red.
  + Place the green electrode gel on 3 electrodes (a pea-sized amount).
  + On each spot where you abraded, wipe off the abrasive gel with a tissue and place an electrode, then tape it down.
* **Attach leads**
  + Using the EDA leads, attach a red wire to the electrode on the pinky side and a black wire to the electrode on the thumb side. Strap the EDA bionomadix onto the participant’s wrist and plug in the leads.
  + Using the ECG leads, attach a black wire to the electrode on the participant’s left collarbone, a white wire to the right collarbone, and a red wire under the ribs.
  + Strap the respiration belt around the participant’s sternum, making sure it’s centered. It should be snug, but not too tight.
  + Plug the respiration belt and ECG leads into the ECG bionomadix and attach it onto the chair.
* **Check signal**
  + Turn off wifi
  + Start the Acqknowledge recording and turn on both bionomadix modules. The ECG should have distinctive R peaks.
  + The respiration should have round peaks and troughs (no flat lines).
  + Ask the participant to take a deep breath and hold it. You should see a plateau in the respiration signal, and the EDA should rise. If the EDA doesn’t rise, make sure the electrodes have good contact and try again; however, 10% of people just won’t have a response.
  + The trigger channel should be at 0.
* Hand the participant the keypad and have them hold it comfortably in their dominant hand or put it on the desk (make sure it’s on).
* Click the reverse button on Acqknowledge to delete the recording thus far
* **Start the Acqknowledge recording**
* **Initiate the task** on the participant computer by pressing the green ‘play’ button.
  + Make sure the participant’s ID is typed in and ‘physio’ is set to 1
* Monitor the Acqknowledge signal and the participant to make sure they are not moving too much, laughing, talking to themselves, etc.
* In the middle of the task, it will prompt them to let you know they are halfway through. **Deliver the mid-task script.**
  + Hey, just a reminder that average performance for college students is about 80%, and we need you to be close to the average in order to use your data. Remember to use the left and right arrow keys to select your answer from the slider and to use the down key to select your answer.
* Once they have acknowledged this, press “c” on the participant computer keyboard to continue.
  + If they ask, tell them that they will still get their SONA credit even if they don’t meet the accuracy minimum.
  + If they say something about the timer being too short, the task being broken, etc, just tell them to do their best.
* Once the task is finished they will be prompted to let you know. You need to remove the leads and bionomadix, then give the participant tissues/wipes so that they can remove the electrodes themselves and throw them out.
* Read the debrief out loud to them, then offer them a copy of the consent form/debrief form to take home.

# Post Session

* Go over questionnaires to make sure they are complete
* Copy data to box
  + *Saliva Study > subjects > saliva\_## > data > psychopy* for MIST data
    - File name: *psychopy\_saliva\_##*
  + *Saliva Study > subjects > saliva\_## > data > physio* for AcqKnowledge data
    - AcqKnowledge data should also go under *saliva\_data > saliva\_##* on the desktop on the left-side computer
    - File name: *physio\_saliva\_##*
* File consent alphabetically in File 2
* Shake the saliva sample vigorously for 10 seconds before storing in cabinet 1
* **Double check** that the cap is screwed on as tight as it can possibly be
* Do SONA credit
* If questionnaires incomplete, send this email using SONA:
  + - We sincerely thank you for your participation in 'Physiology of Emotional Reactivity’. Your contribution to science is valuable and deeply appreciated. We have updated your status on SONA and you should receive your credit shortly. We noticed that you missed some items on your questionnaires – would you mind answering those questions in the attached document and emailing it back to us? Warmly, BAB Lab.

A cartoon of a person with a hand and a hand with red dots

Description automatically generated

# Troubleshooting

* Issues with AcqKnowledge signals:

*Light should be green when signal is connected to BIOPAC box. If light is orange, it indicates issues with connectivity.*

* + If EDA signal (PPGED-R) or ECG/RSP signal (RSPEC-R) not registering:
    - * Try: adjusting antenna, make sure electrode gel has enough time to set, then turn the amplifier/power button on and off again to restart the machine, and/or turn the EDA module on the amplifier off and on again. Make sure to quit AcqKnowledge and restart your file.
      * Make sure the EDA-specific Bionomadix module is turned on – if
      * Make sure that the BIOPAC box is turned on and Wi-Fi is turned off.
* If EDA electrodes won’t stick onto participants hands:
  + Have them first put a glove over their fingertips avoiding the palm area, apply/tape the electrodes down completely, attach leads and plug into wristband then put the glove over the whole hand.
* If keypad is not connecting to the computer:
  + Make sure that keypad is turned on
  + Make sure that computer bluetooth is turned on