BIAC New User Orientation

Marissa Bruce | Duke-UNC Brain Imaging and Analysis Center
Agenda

• Introductions
• Facilities
• Scheduling
• Calendar Entries
• MR Safety
• Scan Session
• BIAC Resources
• BIAC Billing System
• FAQs
Introductions
Welcome to BIAC!

- The Brain Imaging and Analysis Center (BIAC) was created in 1998 as the key component of the campus-wide neuroimaging initiative.

- We are now home to more than sixty researchers and staff members from throughout Duke University and UNC-Chapel Hill, and across diverse disciplines.
Introductions: Todd & MR Technologists

Susan

Lamont

Jennifer
Facilities
Where is BIAC located?

⁻ The main BIAC offices are housed in the Davison Building, fourth floor (Duke Hospital South Green Zone)

⁻ Duke Hospital North houses our research-dedicated MRI suites
Zone Locations & Entry Requirements

- **Zone 1**
  - All areas accessible to the general public

- **Zone II**
  - Areas between the public-accessible Zone I and restricted areas of Zone III and IV

- **Zone III**
  - Area where free access by unscreened non-MR personnel or ferromagnetic objects or equipment can result in serious injury or death

- **Zone 4**
  - MR scanner room
Mock Scanner (Mock1)
Testing Room (Test1)
Scheduling
Accounts

- **BIAC Computer Access** - Use your DHE account to log on to BIAC computers. If you need access to BIAC computers, send an email to help@biac.duke.edu. Please include the following information:
  - First name
  - Preferred name (nickname)
  - Last name
  - Duke NetID (required; request one here)
  - DHE account (required; when requesting NetID at above link, also specify you need a DHE account in the Comments field)
  - Duke Unique ID (7-digit number on the back of your Duke ID)
  - Duke Card # (if you need card key access; 9-digit number on the back of your Duke ID)
  - Institution (Duke, UNC, Other-specified)
  - Department (BIAC, CCN, Radiology, Psychology, Psychiatry, Other-specified)
  - Position (Faculty, Staff, Postdoc, Grad Student, Undergrad, Fellow, Resident, Med Student, Other)
  - Current Email Address (Duke or UNC address preferred)
  - Renewal period (3/6/9/12 months)
  - BIAC Sponsor (BIAC faculty/staff/postdoc or other faculty running an experiment at BIAC)
  - BIAC Sponsor Email
  - **Please have your Sponsor send us a confirmation email.**

- **BIAC Compute Cluster Access** - Use your DHE account to log on to the BIAC Linux Cluster. All registered BIAC Users will have usage privileges.

https://wiki.biac.duke.edu/biac:accounts
Scheduling

- Most often, the experimenter (i.e. the person running the subject) schedules a session on a BIAC scanner

- We strongly encourage you to enter real participant information
  - If a subject is lost and calls the BIAC office, having their name in the calendar helps us find out where they need to be

- It is the expectation that you have a participant when you reserve a slot
Scheduling: Study Details
Scheduling

- How far in advance can you schedule?
Scheduling: Last Minute Scheduling

- Last minute scheduling
  - If a last minute scan is scheduled at the beginning or end of the day, please contact the MR Techs to ensure that coverage will be provided
  - We recommend 1-2 hours notice
MR Tech Schedule

- Normal tech coverage
- Be sure to check the notes (in blue) at the top of the scanner schedule to see exceptions to the normal tech schedule
Null.01

- Should ONLY be used to avoid double-booking a MR Tech
- The experimenter is responsible for placing Null.01 on the opposite scanner during single MR Tech coverage
- If you think someone forgot to schedule a Null.01, please contact the BIAC office before scheduling your study
- In the event of a double-booking, the study that scheduled first (but failed to add a Null) will be rescheduled
- Be sure to check the notes (in blue) at the top of the scanner schedule to see exceptions to the normal tech schedule

- If your study starts at a time when there are 2 techs available and continues to a time when only 1 is available, you need to put a Null.01 on the opposite calendar for just the time there is only 1 tech available.
Calendar Entries
Calendar Entries

- Who is responsible for completing calendar entries?
  - The experimenter running the study (NOT the MR Tech)

- What about if I use Mock1, Test1, DHN1, and DAV1?
  - Those entries still need to be completed!

- Calendar items YOU are required to complete:
  - Actual Start and End Times
  - Experimenter
  - Exam Number(s)
  - MR Tech
  - Subject Name**
  - Subject Type
  - Consent Form Signed
  - Problem (if applicable)
  - Lost Time (if BIAC problem)
Calendar Entries

- What happens if calendar entries are incomplete?
Calendar Entries

- What happens if calendar entries are incomplete?
- Incomplete calendar entries will cause your BIAC experiment to be ineligible for renewal
Calendar Entries: Completed Items

- **Exam Number(s)**
  - The MR Tech will have this number at the time of the scan
  - The Experimenter should enter this number in the calendar

- **Experimenter**
  - Enter the actual person at the scanner running the session

- **MR Tech**
  - The Experimenter should enter the Tech name in the calendar entry

- **Subject Name**
  - Experimenter should enter this info prior to the scan

- **Problem (if applicable)**
  - The Experimenter should enter any problem that arises. Use the “problem details” field to elaborate further
Calendar Entries: Completed Items

Study Details

Experiment Info Page

Schedule ID: 121497
Date: 5/14/2019 Tuesday
Scanner: BIASC

*Required fields.

Problem Details

Notes

Save  Don’t Save  Cancel Study  Delete Study  Undo Changes  Un-Cancel Study
Null.01

- Do **NOT** use Null.01 for the following situations:
  - As a placeholder for an experiment
  - User Tests

- Do **NOT** list any subject information/PHI in the Null.01 calendar entry. Only list the Experimenter’s name so that it can be matched to the actual scan on the opposite scanner
  - All users have access to Null.01 calendar entries. If you list the subject’s information in the Null.01 entry, you have just publicized PHI

- If you delete/cancel a scan, remember to delete/cancel the Null.01 on the opposite scanner if it was used
Claiming Lost Time

- Lost Time should only be claimed if you are unable to use all or any part of your data due to a BIAC-related problem.

- BIAC will enter lost time for the following situations:
  - No Tech Available*
  - BIAC Scanner Down
  - Severe Weather (Duke Policy Activated)

- If your scan encountered a BIAC problem, please be sure to submit a trouble ticket ASAP so that the problem can be investigated and avoided for future scans!
Trouble Tickets

- Trouble tickets can be submitted by clicking on the “Services” tab on the BIAC Homepage or by visiting [www.biac.duke.edu/services/](http://www.biac.duke.edu/services/)
Experiment Information

- If your experiment is not available in the drop-down list, you should check the Experiment Info page for details.
1. Has your experiment expired?

2. Has the experiment run out of hours?

3. Is the IRB protocol expired?

4. Do you have any incomplete calendar entries?
### Common Scheduling/Calendar Errors

- Not knowing who is responsible for what
- Scheduled without subject
- Experiment has no hours left
- Experiment/IRB protocol has expired
- Improper Null.01 use
- Improper UserTest.01 use
  - This is NOT a placeholder for an experiment
- Incomplete calendar entries
  - No subject info
  - Missing exam number
  - MR Tech not listed
  - Lost time not claimed properly
  - Mock1/Test1/DHN1/DAV1 entries are not completed
MR Safety
MR Safety

- 24 hrs/day
- 365 days/year

- The magnetic field is on even when the magnet is **NOT** in use.

- Even if the electrical portion of the machine is off, the magnetic field is still up

- The MR technologist has final say in who may be allowed to go into the operation and/or scanner room.
MR Safety

- The force of the field is measured in Tesla (T)
  - Our scanners are measured at 3.0 Tesla (T)

- The force of the field is greatest at the center of the magnet.
  - The magnetic FORCE INCREASES as you move closer to the center of the magnet

- What is not attracted to the magnet outside the fringe field can be attracted to the magnet as you move closer to the center of the machine

Subject Safety is our #1 Concern!
MR Safety: Medical Implants

- Medical Implants
  - Review Dr. Frank Shellock’s MRI contraindication database: www.mrisafety.com
  
- At least 3 days before your exam, email Todd and all 3 MR Techs with the device model and manufacturer of any medical implants
  - They will reply via email regarding eligibility
  
- It is the Experimenter’s responsibility to get approval prior to the scan!
MR Safety: Pregnancy Tests

- Women of childbearing potential must receive a urine pregnancy test immediately prior to each MRI Scan.
- Very limited exceptions:
  - Females who have not yet menstruated
  - Post-menopausal females
  - Females who have had a hysterectomy
- Supplies are available at the scanners
- Experimenter should facilitate urine collection
- MR Tech will perform pregnancy test
- Participant sex must be listed on the calendar!
Scan Session
Scanner Access

* NEW * How to get BIAC Level I Access:

1. Read and sign off on all relevant SOPs on the Signature Sheet: Level I MRI Access
2. Read the MRI Safety Tutorial and watch MRI Safety Video
3. Complete the online Safety Quiz
4. Complete the MRI Safety Screening form
5. Attend BIAC New User Orientation
6. Return completed forms to BIAC
7. Email help@biac.duke.edu with your Duke Unique ID and your HID-Activated Card Number
Pre-Scan Screening

- All subjects must be either phone screened or interviewed for MRI safety in person before being scheduled for a scan
  - Highly recommended to administer official BIAC MRI Safety Screening Form

- Any questions or concerns about MRI safety found in the initial screening should be addressed with Todd and all 3 MR Techs at least 48 hours before the scan (note: at least 72 hours for implant information)
Pre-Scan Screening

- MRI Techs typically are meeting subjects for the first time the day of the scan and are a last line of defense
  - Responsibility to determine initial MRI safety and subject quality is up to individual lab faculty and staff (unless using BIAC volunteer registry)
  - Thorough review of medical history
    - May require obtaining medical record authorization to review make and model of any implanted metal or part of medical history
    - Emphasis on reviewing and researching any past surgeries as many subjects may not know they have implanted metal after certain procedures (i.e. wire sutures or a screw/pin)
    - Even if implants are deemed safe for scanning, they may cause artifacts
Examples of Pre-Screening Resources

Phone Screening Script

BIAC Phone Screening

Part I: Introductory
Good morning, my name is Marla Smith and I am calling from the Client Risk Imaging and Analysis center, are you free to answer a few questions about your health?

If yes, great, would you like to take the phone screening now?

If yes, please tell me your name and phone number.

Part II: Risk Assessment

If yes, our research-based functional imaging technology helps make a picture of your brain while you are doing a psychology task. We study the brain associated with thoughts, behaviors, and emotions. We have a number of studies going on at any time, and we are still analyzing the MRI data at this moment. If you have ever been in a car accident, you will go to the MRI center and be driven on your back in a MRI machine with us. We will send you to MRI and then return, but you may feel a little uncomfortable. The machine will make some noise, but pictures of your brain, the audio noise, and magnetic fields used in MRI will return the results better, but do not feel a risk from the noise as well. If you ever have a question, please call us at 123-456-7890 or ask your doctor.

Many studies last between 1.5 hours, and up to about 2.5 per hour, but the duration and procedures depend on the particular experience. Are you still interested in participating?

If yes, we will ask you to read this questionnaire before you can be considered for our studies. The first step is a 5-10 minute screening, and the second step is to come into the clinic for a total of 20 minutes. In order to participate, you will answer yes or no questions and then sign a consent form. We will send you a letter, and you will receive a letter from the clinic of the clinic, we will send you a letter of the clinic, and you will receive a letter of the clinic.

Would you be interested in the phone screening?

If yes, think about how long you would have a good day.

Part III: Screening Questions

If yes, before you participate in the phone screening, I need you to answer a set of questions—these questions do not affect your ability to participate.

1. Have you done any previous MRI studies or have you been in a MRI scanner?
   - "Yes," the study is conducted in the presence of high magnetic fields, so your participation in MRI does not require surgery.
   - "No." Recognize carefully with a subject who has not been in the scanner.

2. Do you have any of the following medical conditions in your family?
   - Asthma, myocardial infarction, diabetes, stroke, or any type of heart disease.
   - Premature birth, smoking, obesity, asthma, or any type of heart disease.

3. Do you have any of the following medical conditions in your family?
   - Sickle cell disease, HIV/AIDS, hepatitis B or C, or any type of blood disease.
   - Premature birth, smoking, obesity, asthma, or any type of heart disease.

4. Do you have any of the following medical conditions in your family?
   - Headache, asthma, diabetes, obesity, or any type of heart disease.
   - Premature birth, smoking, obesity, asthma, or any type of heart disease.

5. Do you have any of the following medical conditions in your family?
   - Headache, asthma, diabetes, obesity, or any type of heart disease.
   - Premature birth, smoking, obesity, asthma, or any type of heart disease.

6. Do you have any of the following medical conditions in your family?
   - Headache, asthma, diabetes, obesity, or any type of heart disease.
   - Premature birth, smoking, obesity, asthma, or any type of heart disease.

7. Do you have any of the following medical conditions in your family?
   - Headache, asthma, diabetes, obesity, or any type of heart disease.
   - Premature birth, smoking, obesity, asthma, or any type of heart disease.

8. Do you have any of the following medical conditions in your family?
   - Headache, asthma, diabetes, obesity, or any type of heart disease.
   - Premature birth, smoking, obesity, asthma, or any type of heart disease.

9. Do you have any of the following medical conditions in your family?
   - Headache, asthma, diabetes, obesity, or any type of heart disease.
   - Premature birth, smoking, obesity, asthma, or any type of heart disease.

10. Do you have any of the following medical conditions in your family?
    - Headache, asthma, diabetes, obesity, or any type of heart disease.
    - Premature birth, smoking, obesity, asthma, or any type of heart disease.

Thank you for your time!
Examples of Pre-Screening Resources

- BIAC MRI Safety Screening Form

Duke-UNC Brain Imaging and Analysis Center: MRI Safety Screening

All individuals entering the MRI suite must fill out this information. Any potential contraindications must be reported with the individual’s medical record and the BIAC MRI Safety Committee before being cleared to enter the scanner room.

Part I: For all individuals entering the scanner room

Name: [Name]
Address: [Address]
City: [City]
Zip Code: [Zip Code]
Phone: [Phone]

1. Have you ever had an injury to the eye involving a metallic object? Yes No
2. Have you ever used metal rivets, buttons, zippers? Yes No
3. Have you ever had surgery involving eye, nose, ear? Yes No
4. Have you ever used a metal strip (e.g., on your mouth or ears)? Yes No
5. Do you have any metal heart valves or pacemakers? Yes No
6. Do you have any medical implant (e.g., surgically implanted electronic device)? Yes No
7. Do you have any medical device (e.g., insulin pump, dental, surgical, etc.)? Yes No
8. Do you have any other metal objects in your body? Yes No

Example form: BIAC MRI Safety Screening Form

Weight: [Weight]
Height: [Height]

WARNING: Complete template or all items in template. This document must be signed by the health care provider.

Before you enter the scanner room, you must remove all metallic objects:
- All contents of pockets, including back pockets
- Sheet that contains any metal (e.g., metal-studded)
- Metal plate, clips, scissors, razors
- Hair pins, clips, scissors, razors
- Pins, or buttons or belt
- Dentures or removable retainers
- Belt with metal (e.g., buckle)
- Necklaces, chains

Part II: For all individuals entering the scanner bore

1. Are you claustrophobic? Yes No
2. Do you have an IUD or chaperone containing metal? Yes No
3. Are you pregnant, undergoing her menstrual period, or undergoing fertility treatment? Yes No
4. Do you currently have a fever or other acute illness? Yes No
5. Please list any surgeries or other invasive medical procedures in as much detail as possible.

Revision: 7/28/2017

Please indicate if you have any of the following:

- Yes
- No
- Unknown

<table>
<thead>
<tr>
<th>Condition</th>
<th>Yes</th>
<th>No</th>
<th>Unknown</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ankylosing spondylitis</td>
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<tr>
<td>Cardiac pacemaker</td>
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<tr>
<td>Implanted cardiac defibrillator (ICD)</td>
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<tr>
<td>Electronic implant or device</td>
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<tr>
<td>Magnetically activated implant or device</td>
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<tr>
<td>Neurostimulation system</td>
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<tr>
<td>Spinal cord stimulator</td>
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<tr>
<td>Intracranial or spinal stimulator</td>
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<td>Bone growth factor stimulator</td>
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<tr>
<td>Corticosteroid, any other bone implant</td>
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<td>Insulin or infusion pump</td>
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<td>Implanted drug delivery device</td>
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<tr>
<td>Any type of prosthesis (eye, penis, etc.)</td>
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<tr>
<td>Heart valve prosthesis</td>
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<tr>
<td>Eye or ear prosthesis</td>
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<td></td>
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<tr>
<td>Artificial or prosthetic limb</td>
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<tr>
<td>Metallic clip (filter or ear)</td>
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<tr>
<td>Shunt (spinal or intracranial fluid drain)</td>
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<tr>
<td>Vascular access port and/or catheter</td>
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<tr>
<td>Radiation or implants</td>
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<tr>
<td>Medication patch (Nicholas, Sinemet, etc.)</td>
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<tr>
<td>Any metal fragment or foreign body</td>
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<tr>
<td>Wire or nail implant</td>
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<tr>
<td>Tissue expander (e.g., breast)</td>
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<tr>
<td>Surgical staples, clips, or metallic sutures</td>
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<tr>
<td>Joint replacement (hip, knee, etc.)</td>
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<tr>
<td>Bone (joint prosthesis, scoliosis, spine, hip, etc.)</td>
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<td>Dental or orthodontic</td>
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<td>Tattoo or permanent makeup</td>
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<td>Body painting or jewelry</td>
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<tr>
<td>Hearing aid (remove before entering MRI)</td>
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<tr>
<td>Other implant</td>
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I attest that the above information is correct to the best of my knowledge, and I understand and acknowledge the contents of this form and that I have the opportunity to ask questions regarding the information on this form and that I understand and acknowledge the BIAC MRI procedure that I am about to undergo.

Signature of Patient Completing Form
Signature of BIAC MRI Screened Patient Name
Date

Form Completed By: [Name]
Note: Participation Other Others

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Scan Session: UserTest.01

- UserTest.01 = free testing time

- UserTest.01 = no MRI data, but you can...
  - Set up your protocol
  - Test scanner triggering
  - Time your task
  - See what your stimuli looks like inside the scanner

- UserTest.01 can be scheduled <24 hours in advance
  - Paid study CAN schedule over a User Test!
  - Please note if you will or will not need a MR Tech

- We highly recommend scheduling a UserTest.01 prior to your first participant!
Scan Session: Planning your Time

- A scheduled session must include:
  - (1) **Protocol time**: the time it takes to run a protocol
  - (2) **Breaks**: if there is a short resting period between runs
  - (3) **Set-up time**: the time it takes to review the screening forms and getting the participant set up
  - (4) **Exit time**: the time it takes to get a participant out of the scanner

- Typically allot 15 min beyond your protocol time
Day of Scan Procedure

Step 1: Escort subject to MRI hallway and ask them to place all belongings into lockers

Step 2: Ask subject to remove all metal objects from their person and place in locker (jewelry, bobby pins, etc.)

Step 3: Ask subject to pat and empty any and all pockets

All subjects should be MRI ready before entering the console room

Step 4: If scanning a woman of childbearing potential, conduct the urine pregnancy test

Step 5: Walk subject to console room and have them fill out the BIAC MRI Safety Sheet

Step 6: Ask subject to re-check for any metal on their person or in their pockets

Step 7: MRI Tech will review form and begin their scanning procedure
Scan Session: Visitors

- Visitors and family members are never allowed in the console room

- What are your options?
  - Schedule time in Test 1, DHN1, or Mock 1*
  - Parent/guardian can wait outside BIAC5
  - Parent/guardian can wait outside the office suite
  - Parent/guardian can wait in the Children’s Hospital Lobby
  - Parent/guardian can sit in the magnet room, if…
    - MR Safety Screening Form completed
    - No contraindications to scanning
Data Quality and Movement

- When screening subjects before the MRI, incorporating a mock scan can help identify if subjects will be able to remain still for the duration of the scan.

- Be observant of medical conditions that may cause greater than normal movement (e.g., Bronchitis in the winter months or a common cold).

- Experimenters at the scanner should be observing data acquisition and noting if there are any artifacts:
  - If subject movement – remind subject to be still, or if it continues end scan early.
  - If artifact from MRI – immediately submit a trouble ticket for review from BIAC Help.
Data Quality and Movement

- Utilize free UserTest sessions on calendar to run through protocol multiple times before beginning data collection.

- Consult with BIAC to ensure scanning protocol is correct before booking scanner time.

- Data should be reviewed for QA as soon as possible after collection.

- Utilize the online trouble ticket system to alert BIAC to potential issues with scanning or reach out to Dr. Todd Harshbarger:
  - If using a BIAC Volunteer subject, alert Marissa Bruce as well.
  - BIAC is not responsible for artifacts related to subject motion.
Scan Session: Hospital Courtesies

- At the hospital, patients and their transporters have the right of way
- Please be sure to wait if patients are in the middle of the MR hallway
- ID Badge must be visibly worn at all times
Scan Session: Experimenter Courtesies

- Please be sure to wait until the scan before yours is finished, and the participants have exited the console room before entering.

- What are your options?
  - Schedule Test1/DHN1/Mock1* and wait in those rooms
  - Please check the calendar prior to entering a room!

- Please do not wait in the hallways

- Scans are not allowed to run over the scheduled time
Scan Session: Experimenter Courtesies

- Do NOT train/consent/test subjects in the hallways
  - This includes the round table by BIAC 5

- If it is necessary to talk with a member from another lab, pull them aside and do not talk to them in front of their subjects

- Additionally, a subject may be from a sensitive or vulnerable population and require the undivided attention of the lab team.
Scan Session: Experimenter Courtesies

- After your session, please return all supplies, equipment, and furniture to where they should be so the room is ready for the next User.
- If you have plugged in or reconfigured anything to a non-standard configuration, please make sure that you have returned everything to standard configurations.

CLEAN UP AFTER YOURSELF, YOUR MOTHER DOESN'T WORK HERE
BIAC Resources: Stimulus Controls

- We have many peripherals available for you to use!
- Details instructions can be found here: https://wiki.biac.duke.edu/biac:experimentalcontrol
BIAC Resources: Subject Recruitment

- BIAC maintains an active subject pool (~425 members)
- Healthy, “Normal” participants

**Criteria:**
- 18-80 years of age
- Right-handed
- Earned at least a high school diploma
- English speaker (native/fluent)
- No history of brain injury or disease
- No anti-depressants, anti-anxiety, or hypertension medication use
BIAC Resources: Using BIAC Subject Pool

If needed, submit IRB amendment to add BIAC Subject Pool Protocol (Pro00010672) to your protocol.

- Note: protocol must be approved by the BIAC Scientific Review Committee prior to beginning recruitment.

If needed, provide study title, PI name(s), and IRB number to the BIAC Research Coordinator for IRB submission.

Once both protocols have been approved, submit either a “Behavioral Study Request” form or a “MRI Study Request” form to the BIAC Research Coordinator.

Please confirm that you have requested Mock1/Test1/DHN1/DAV1 on your BIAC Research Proposal if you need a room for consenting, debriefing, or behavioral tasks.

BIAC’s Research Coordinator will use the provided information to contact eligible subjects from our subject pool.
BIAC Resources: Using BIAC Subject Pool

- Please be aware that we schedule and recruit for many BIAC studies.
- Please provide enough time for IRB amendment approval and/or contacting participants if you need subjects.
- Try to be flexible with your schedule, our scanners have extended hours Monday - Wednesday nights, plus availability on Thursday nights/Saturdays alternate.
- Keep in mind that many of our subjects are students, be mindful of the academic calendar (fall break, exams weeks, major holidays, spring break, etc.)
BIAC Resources: Subject Feedback

- Please let us know if a subject does not show for a scan as they will no longer be contacted for our studies.

- Please let us know if a subject performs extremely poorly on a task, is unusually unmotivated, or falls asleep during the scan.
  - We have a two-strike policy with subjects for instances like these, so the more feedback—the better our recruitment can be.

- Please let us know if the subject has trouble remaining still during the scan.
BIAC Billing System
BIAC Billing System

- Each month, we generate invoices for each experiment through the BIAC Scanner Schedule System
  - Invoices will be emailed on the 1st business day of the following month

- Calendar entries must be fully documented by the end of the last day of every month. Once the invoices are generated, changes cannot be made.
  - This includes making any lost time claims and/or cancellations
BIAC Billing System

- Invoices are sent to the individuals that were listed on the initial BIAC proposal form received by the Scientific Review Committee.
- These individuals should review the invoices upon receipt and contact billing@biac.duke.edu to confirm the charges.
- Payments will be processed within 2-4 days after the invoices are sent out.
  - We will charge the last cost object (fund code) that we have on file for the study. If the funding source has changed, please notify BIAC as soon as you have the new fund code. Billing Contacts can view fund code in the Experiment Info Page.
- Updating calendar entries regularly will avoid the need for corrections on the invoices.
# BIAC Scanner Time Invoice

Please remit payment to:  
Brain Imaging and Analysis  
919-681-9337  
Center  
919-681-7033 Fax  
Attn: Billing  
billing@biac.duke.edu  
Campus Box 3918  
Durham, NC 27710

**Department**  
BIAC

**Responsible Investigator**  
Allen Song  
allen.song@duke.edu  
elenamusty@duke.edu

**Billing Contact**  
Elena Musty

<table>
<thead>
<tr>
<th>Experiment</th>
<th>Date</th>
<th>Start</th>
<th>End</th>
<th>Exam(s)</th>
<th>Canceled</th>
<th>Lost</th>
<th>Overlap</th>
<th>Credit</th>
<th>Amount Billed</th>
<th>Amount Due</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIACS 15-Apr-2019 2:30 PM 3:00 PM 00606</td>
<td>No</td>
<td>0 min.</td>
<td>0 min.</td>
<td>$290.00</td>
<td>$0.00</td>
<td>$280.00</td>
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<td></td>
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<td>BIACS 25-Apr-2019 3:30 PM 4:30 PM 00845</td>
<td>No</td>
<td>0 min.</td>
<td>0 min.</td>
<td>$560.00</td>
<td>$0.00</td>
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<td></td>
</tr>
</tbody>
</table>

Current charges through 4/30/2019 (2 studies)  
**$840.00**

Past Due charges (0 studies)  
$0.00

Development funds contributed by BIAC  
$0.00

Total for [blurred] (2 studies)  
**$840.00**

Current charges through 4/30/2019 (2 studies)  
**$840.00**

Past Due charges (0 studies)  
$0.00

Development funds contributed by BIAC  
$0.00

Total for Allen Song (2 studies)  
**$840.00**
BIAC Billing System: Helpful Definitions

- **Current Rates (effective 7/1/2018):**
  - Rate for Scans = $560 per hour
  - Cancellation Fee Rate = $140 per hour
    - Scans cancelled with less than 48 hours notice will incur the cancellation fee

- **Lost Time:** This is a credit for time/data lost due to a BIAC-related problem. The experimenter should claim this on the BIAC Scanner Schedule.

- **Overlap Credit:** This is a credit granted when a paying study takes over a canceled slot and completes the scan.
  - Non-Paying Studies:
    - UserTest, SysDevelop, SysService, QA, Demo
BIAC Billing System: Cancellations

- Canceled scans incur a fee at the rate of $140/hour (effective 7/1/2018)
  - Please note that this charge will only apply to those sessions which are canceled <48 hours of the session start time

- Sessions canceled with >48 hours notice, or due to scanner down time, will have no associated charges.

- If a BIAC MR Tech becomes unavailable for your scan, we will not charge you for the time.
BIAC Billing System: Cancellations

- The cancellation fee can only be applied to the entire session
  - You will be charged the full rate for your scheduled time, even if you only use a portion of it.

- The earlier you cancel your study on the calendar, the more time another paying study has to take over the slot
FAQs

- Q: I am at the scanner and my session ended and I need more time. What do I do?
FAQs

Q: I am at the scanner and my session ended and I need more time. What do I do?

A: If the MR Tech and scanner are available (no other session booked), you may continue your scan by adding additional time to the calendar. If you do not add it, the MR Tech will and you will be billed appropriately.

A: You can only add time in 30 minute increments. (i.e. If you schedule 30 minutes but need 45, you will pay for 1 hour. The time you schedule on the scanner should be adequate to cover time you enter the console room, until the time you leave. This includes the time for the subject to enter and exit the scanner.)
FAQs

- Q: I no longer need my full time slot, can I cancel a portion of my scheduled scan time for a reduced fee?
FAQs

Q: I no longer need my full time slot, can I cancel a portion of my scheduled scan time for a reduced fee?

A: You can cancel the portion on the calendar, however you will not receive a reduced fee unless a paying study takes over your time slot (overlap credit will apply). If you scheduled time and run your study, you will be charged for the entire scheduled slot regardless of how much time you use.
FAQs

- Q: My subject has an implant/device/object but says they have had a MRI scan since then. Do I still need to get the MR Techs to clear it before their scan? Even if the scan was done at Duke?
FAQs

• Q: My subject has an implant/device/object but says they have had a MRI scan since then. Do I still need to get the MR Techs to clear it before their scan? Even if the scan was done at Duke?

• A: YES! You will still need to have the implant/device/object cleared by the MR Techs at least 3 days prior to the scan.

• A: YES! Both 1.5T and 3T scanners are used clinically, so implants/devices/objects that were at one time cleared for 1.5T have not all been cleared for 3T.
Next Steps…
Next Steps…

- Review the BIAC SOPs listed on the “Signature Sheet: Level 1 MRI Access” form:
  https://www.biac.duke.edu/library/forms/BIAC_Level_1_MRI_Access_Signature_Sheet.pdf
  
  - Return completed and signed form to BIAC Main Office (in person, email, or fax)
  - If you already have a MRI Safety Form on file, then you do NOT need to complete a new one
Questions?
Thank you for attending the BIAC New User Orientation!