



BIAC New User Orientation

Jenn Graves | Duke-UNC Brain Imaging and Analysis Center



- Introductions
- Facilities
- Accounts and Access
- Scheduling and Calendar Entries
- Protocol Planning
- Participant Screening and MR Safety
- Day of Scan Expectations
- BIAC Resources and Billing System
- FAQs
- Next Steps

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: Dr. Todd Harshbarger & MR Technologists



Dr.Todd Harshbarger Director of MR Operations

Jenn Graves

Lamont Conyers

Susan Music



Where is **BIAC** located?

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

 Duke Hospital North houses our research-dedicated MRI suites and our testing rooms.











MRI Entrance

Overview of the Scanner Hallway



Key Places

I)MRI Department Entrance 2)Restroom 3)Restroom 4)Lockers 5)MOCK I 6)DHNI



4) Lockers



5) Mock Scanner (Mock1)





6) DHNI



Overview of the Scanner Hallway





8' 0" x 60' 5 7/8"



7) BIAC 6



BIAC 6 Suite



BIAC 6 Scanner



8) TEST I





10) BIAC 5

(Hallway Entrance)



10) BIAC 5 Suite





BIAC 5 Scanner



DAV I*



*not located in the MRI hallway

Facilities Overview

- Lockers
- Test Rooms
 - MOCK I
 - DHNI
 - TEST I
 - DAV I*

- Scanners
 - BIAC 5
 - BIAC 6

Accounts and Access

BIAC Computer and Cluster Access

- BIAC Computer Access Use your DHE account to log on to BIAC computers. If you need access to BIAC computers, send an email to Melp@biac.duke.edu. Please include the following information:
 - First name
 - Preferred name (nickname)
 - Last name
 - Solution Duke NetID (required; request one Solution)
 - DHE account (required; when requesting NetID at above link, also specify you need a DHE account in the Comments field)

 - Duke Card # (if you need card key access; 9-digit number on the back of your Duke ID)
 - Institution (Duke, UNC, Other-specify)
 - Department (BIAC, CCN, Radiology, Psychology, Psychiatry, Other-specify)
 - 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.
- In order to use various BIAC computer systems (including the BIAC Computer cluster and the scheduling calendar), you will need a DHE (Duke Health Enterprise) account or be on a DHE computer
- More info at <u>https://wiki.biac.duke.edu/biac:accounts</u>

DHE Access

- Not the same as your Duke Account
- To get DHE Access
 - Need to have someone with a DHE appointment (faculty/staff) sponsor you at this site: <u>Sponsored Accounts (duke.edu)</u>

Duke Sponsored Accounts											
Request/Manage Policies											
Request and Manage Accounts											
DHE Access	Guest (Affiliate) Accounts	Non-person Accounts									
For Duke staff, faculty, or students who need to be sponsored for Duke Health Enterprise access.	For non-Duke users needing physical or electronic access at Duke.	For test and service accounts to support Duke services.									
Request a Duke Health DHE Account for a Duke employee or Duke student *	Request a new guest account for a non-Duke user	Manage my test and service accounts (0)									
		You do not have access to request a non-person account. More information here.									

DHE Account Request Form

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Request a Duke Health DHE Account for a Duke employee or Duke student

1. Select DHE account type*

Collaborator

Contractor

O Duke Health Employee

Student, non-SoM/SoN

Student, SoM/SoN

Training

Volunteer

Other

2. Set Account Preferences

User Information

NetID of user needing Duke Health DHE Account*:

Business justification*:

User is a minor (less than 18 years old)

Account Length

Account(s) will expire on 04/29/2024 unless renewed. Or, choose an earlier expiration date.

□ I agree to the terms of DHE account sponsorship.

Access Emails

- You do not need to email BIAC before you get DHE access in addition to filling out the previous form
- You do need to email <u>biac-help@duke.edu</u>to get BIAC computer access

*DHE access only gives you access to the network – BIAC needs to give you permissions to the computers

Scanner Access

- 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 <u>help@biac.duke.edu</u> with your Duke Unique ID and your HID-Activated Card Number

Scheduling a Scan

Scheduling

- Most often, the experimenter (i.e. the person running the subject) schedules a session on a BIAC scanner
- It is the expectation that you have a participant when you reserve a slot
- Last minute scheduling
 - If scheduling a scan less than 24 hours before their start time or on the same day, please email <u>BIAC-Schedule@duke.edu</u> to ensure coverage will be provided

How far in advance can you schedule?

Experiment Information for Demo.01

Go back to <u>main calendar view</u>. Show <u>all experiments</u> user "jel76" has access to.

Summary

This experiment is currently valid. This experiment's scheduling window allows you to schedule through 7/5/2023. This experiment has 269 incomplete calendar entries (<u>see below</u>).

You may contact the <u>BIAC Scientific Review Committee</u> to request more time or to <u>renew your experiment</u>. See <u>SOP109: Approval for BIAC Scanner Use</u> for more details.

Experiment		Scanner		Investigator		Responsible Investigator		Department		Start Date		End Date			
Demo.01 Allen			llen Song	4	Allen Song			BIAC	12/1/2000			1/1/2024	Demonstrations using MR facilities		
				Scheduling Window (5/3/2023 - 5/24/2023) Scheduling Window (5/25/2023 - 7/5/2023)											
Experiment	Time Allocated (hours)	Time Left (hou	rs) Time Used (hours) Lost T	Fime [Claimed] (hours)	Total Time (hou	<u>s)</u>	Window Size (days)	Max Study Size (hours)	Max Weekly	Time (hou	Window Size (days) Max Study Size (hours)	Max Weekly Time (hou r s)
Demo.01	1000		190.5	809.5	8.5 [8.	.5]	818		21	4	None		42	4	6
Z WINDOWS:															

- 21 days out
 - No limit on number of weekly hours, but can only schedule 4 hours at a time
- 42 days out
 - Weekly limit of 4 hours (can be increased if needed)
 - Can schedule 4 hours at a time

Scheduling Step 1: Locate the calendar page

Go to
 <u>https://www.</u>

<u>biac.duke.edu</u>
<u>/</u>

 Click on the "Services" tab


Scheduling Step 2: Access the Calendar

- Once in the Service tab, click on the Calendar icon
- *Must be on the Duke Hospital (DHE) network or computer to access the calendar



BIAC Scanner Schedule

BIAC Scanner Schedule 🗙 🗙

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BIAC Scanner Schedule	•	Sunday 3/19/2023	Monday 3/20/2023	Tuesday 3/21/2023	Wednesday 3/22/2023	Thursday 3/23/2023	Friday 3/24/2023	Saturday 3/25/2023
Experiment Info Page		Add item	Add item	Add item	Add item	Add item	normal tech coverage 8-3:30 single tech coverage 3:30-5	no tech
MR Tech Schedule	8:00 AI	1						
							Null.01	
Start Time: 8:00 AM	9:00 AI	1					NOGGIN.01 Jeffrey Browndyke	
Start Time: 10:00 RM	10.00 4		Null.01			Null.01	9:00 AM-10:30 AM	
3top mile. 10.00 PM	10:00 AI		Gloria Meiers	Null-01	Null.01	Ryan Bell	Null-01	
Update View	11:00 AI	1		ALADDIN.01	UserTest.01	Null.01	NCANDA.04	
				Jeffrey Browndyke	Gloria Meiers	NOGGIN.01	Casey Pearce	
3/19/2023 Today	12:00 PI	1	NoTech.01	Null.01	QA.04	Jeffrey Browndyke 11:30 AM-1:00 PM	11:00 APP12:50 PP	
March 💙 2023 🗸			None 12:00 PM-2:00 PM		QA.04			
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12 13 14 15 10 17 18 19 20 21 22 23 24 25	3:00 PI	1		QA.04	Cleaning.01	CHI.01	ADRC.01	
26 27 28 29 30 31				QA.04	UserTest.01	Ryan Bell	Emily Maingi	
	4:00 PI	1		Null.01	Trong-Kha Truong		Null.01	
Experimenters must complete all calendar entries for				CHI.01 Buan Ball	SysDevelop.53		Emily Maingi	
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BIAC Scanner Schedule

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Experiment Info Page	1	Add item	Add item	Add item	Add item	Add item	normal tech coverage 8-3:30 single tech coverage 3:30-5	no tech	
MR Tech Schedule	8:00 AM	1							
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Start Time: 8:00 AM			Null.01			Null.01	9:00 AM-10:30 AM		
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				Jeffrey Browndyke	Gloria Meiers	NOGGIN.01	Casey Pearce		
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Scheduling Step 3: Select the scanner and choose an open time slot

BIAC Scanner Schedule

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MR Tech Schedule		8:00 AM	1						
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		9:00 PM	1		Cleaning.01				
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Scheduling Step 4: Enter Study details



- Fill out start and end time of scan
- 2) Experiment

- 3) Experimenter
- 4) Subject type

Scheduling Step 5: Enter Study details – Patient Information

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Study Details		b Subject Information - Google Chrome	—		×			
Experiment Info Page		■ biac-web.dhe.duke.edu/calendar/Subject.asp?NoBack=true&SubjectID=						
Date 3/23/2023 Thursday *Scanner BIAC5 V Subject Notes	*Start Time 6:30 PM V *Experiment V Change Subject	*Last Name doe *Birth Date 1/ *Required fields. Find No Subject	1/2001			~		
*Required fields. Add Don'tAdd								

Scheduling Step 6: Save



Once all the required information is selected from the drop downs, click "Add" to save the scan on the schedule

Scheduling Step 7: Make sure the scan is on the schedule

BIAC Scanner Schedule

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·	 		Gloria Meiers	Null.01	Null.01	Ryan Bell	Null.01	
Update View	 11:00 AM			ALADDIN.01	UserTest.01	Null.01	NCANDA.04	
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	1:00 PM		00000		Null.01	Null.01	NoTech.01	
1 2 3 4				Null.01	NoTech.01	NoTech.01	None	
5 6 7 8 9 10 11	2:00 PM			NoTech.01	Null.01	Null.01		
12 13 14 15 16 17 18				QA.04		Null.01	Null.01	
19 20 21 22 23 24 25	3:00 PM			QA.04	Cleaning.01	CHI.01	ADRC.01	
26 27 28 29 30 31				QA.04	UserTest.01	Ryan Bell	Emily Maingi	
	 4:00 PM			Null.01	Trong-Kha Truong		Null.01	
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What to do if you can't schedule your scan



Experiment Information Page

Experiment Information for Demo.01

Go back to main calendar view. Show all experiments user "jel76" has access to.

Summary

This experiment is currently valid. This experiment's scheduling window allows you to schedule through 7/5/2023. This experiment has 269 incomplete calendar entries (see below).

You may contact the <u>BIAC Scientific Review Committee</u> to request more time or to <u>renew your experiment</u>. See <u>SOP109: Approval for BIAC Scanner Use</u> for more details.



- I. Has your experiment expired?
- 2. Has the experiment run out of hours?
- 3.Are you outside of the scheduling window?
- 4. Is the IRB protocol expired?

IRB Renewal: Calendar Entries

- Incomplete calendar entries will cause your BIAC experiment to be ineligible for renewal
- Experiment info page will show all incomplete entries
 - This page also provides the link to the steps to take to renew your experiment when the time comes
 - Link:

https://www.biac.duke.edu/research/st arting-research-biac Please fix the following incomplete calendar entries!

Experiment	Date	Start	End	Scanner	Experimenter
Demo.01	1/27/2023	4:30 PM	5:30 PM	BIAC5	Todd Harshbarger
Demo.01	1/5/2023	2:30 PM	5:30 PM	DHN1	Rachael Wright
<u>Demo.01</u>	11/15/2022	3:30 PM	4:30 PM	BIAC5	Ryan Bell
Demo.01	11/15/2022	3:30 PM	4:30 PM	BIAC5	Ryan Bell

Experiment Information for Demo.01

Go back to <u>main calendar view</u>. Show <u>all experiments</u> user "jel76" has access to.

Summary

This experiment is currently valid. This experiment's scheduling window allows you to schedule through 7/6/2023. This experiment has 269 incomplete calendar entries (see below).

You may contact the <u>BIAC Scientific Review Committee</u> to request more time or to <u>renew your experiment</u>. See <u>SOP109: Approval for BIAC Scanner Use</u> for more details.

Scheduling a Null Step-by-step

Null.01

- When to use:
 - To avoid double booking when single tech coverage
 - To schedule the required 30-minute cleaning session before the scan
- When not to use:
 - To book a Usertest
 - To book a paid scan
 - When multiple techs are available

*In the event of a double-booking, the study that scheduled first (but failed to add a Null) will be rescheduled

Null.01

- Scheduled the same as a scan
- DOES NOT contain participant information
- If you delete or cancel a scan, remove the Nulls as well

To schedule a Null for cleaning...

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BIAC Scanner Schedule	• •	Sunday 3/19/2023	Monday 3/20/2023	Tuesday 3/21/2023	Wednesday 3/22/2023	Thursday 3/23/2023	Friday 3/24/2023	Saturday 3/25/2023
Experiment Info Page		Add item	Add item	Add item	Add item	Add item	normal tech coverage 8-3:30 single tech coverage 3:30-5	<u>no tech</u>
MR Tech Schedule	8:00 AM							
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Start Time: 8:00 AM	5.00 AT		Null.01			Null.01	Jeffrey Browndyke	
Stop Time: 10:00 PM	10:00 AM		Demo.01			CHI.01	9:00 AM-10:30 AM	
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1 2 3 4	2.00.014			Null.01	NoTech.01	NoTech.01	None	
5 6 7 8 9 10 11	2:00 PM			NoTech.01	Null.01	Null 01	Null 01	
19 20 21 22 23 24 25	3:00 PM			QA.04	Cleaning 01	CHL01	ADRC 01	
26 27 28 29 30 31				QA.04	UserTest.01	Ryan Bell	Emily Maingi	
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	9:00 PM			Cleaning.01				
				Dis Davalan E2				

Click on the time slot right before your scan



I) End time will be 30 minutes after your start time
 2) Select "Null.01" for the Experiment
 3) Select your name for the Experimenter
 4) Click "Add" to save

*Nulls are not for scheduling participants so "Change Subject" and Subject Type" options will NOT be available

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				Gloria Meiers	Null.01	Null.01	Ryan Bell	Null.01	
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March V 2023 V				None 12:00 PM-2:00 PM		QA.04	Canceled		
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12 13 14 15 16 17 18					QA.04		Null.01	Null.01	
19 20 21 22 23 24 25		3:00 PM	I		QA.04	Cleaning.01	CHI.01	ADRC.01	
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by <u>Francis Favorini</u> .		0.00 PP		SvsDevelon 53					
		9:00 PM		3300000000	Cleaning.01				
		5.0011			SysDevelop.53				
					-/				

*Null.01 slots are only added to the slots BEFORE the scans, you do not need to add one after the scan

To schedule a Null during single tech coverage...

BIAC Scanner Schedule

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BIAC Scanner Schedule	▲ ▶	Sunday 3/19/2023	Monday 3/20/2023	Tuesday 3/21/2023	Wednesday 3/22/2023	Thursday 3/23/2023	Friday 3/24/2023	Saturday 3/25/2023
Experiment Info Page		Add item	Add item	Add item	Add item	Add item	normal tech coverage 8-3:30 single tech coverage 3:30-5	no tech
MR Tech Schedule	8:00	AM						
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				Jeffrey Browndyke	Gloria Meiers	NOGGIN.01	Casey Pearce 11:00 AM-12:30 PM	
3/23/2023 Today	12:00	PM	NoTech.01	Null.01	QA.04	11:30 AM-1:00 PM		
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5 6 7 8 9 10 11	2:00	PM		NoTech.01	Null.01	Null.01		
12 13 14 15 16 17 18				QA.04		Null.01	Null.01	
19 20 21 22 23 24 25	3:00	PM		QA.04	Cleaning.01	CHI.01	ADRC.01	
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Info Missing Overlap	7:00	PM						
by Francis Favorini.	8:00	PM	Cleaning.01					
			SysDevelop.53					
	9:00	PM		Cleaning.01				
				SysDevelop.53				

Check the MRI Tech Schedule to see normal coverage

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



To schedule a Null during single tech coverage...

BIAC Scanner Schedule

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BIAC Scanner Schedule	▲ ▶	Sunday 3/19/2023	Monday 3/20/2023	Tuesday 3/21/2023	Wednesday 3/22/2023	Thursday 3/23/2023	Friday 3/24/2023	Saturday 3/25/2023
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5 6 7 8 9 10 11	2:00 PM			NoTech.01	Null.01	Null.01		
12 13 14 15 16 17 18				QA.04		Null.01	Null.01	
19 20 21 22 23 24 25	3:00 PM			QA.04	Cleaning.01	CHI.01	ADRC.01	
26 27 28 29 30 31				QA.04	UserTest.01	Ryan Bell	Emily Maingi	
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erimenters must complete all calendar entries for				CHI.01	SysDevelop.53		Emily Maingi	
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by Francis Favorini.	8:00 PM		Cleaning.01					
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Book Null for both scan time and cleaning slot

To schedule a Null during single tech coverage...

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BIAC Scanner Schedule	◀ ▶	Sunday 3/19/2023	Monday 3/20/2023	Tuesday 3/21/2023	Wednesday 3/22/2023	Thursday 3/23/2023	Friday 3/24/2023	Saturday 3/25/2023
Experiment Info Page		Add item	Add item	Add item	Add item	Add item	normal tech coverage 8-3:30 single tech coverage 3:30-5	<u>no tech</u>
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12 13 14 15 16 17 18			Amanda Nelli		None	Amanda Nelli	Null.01	
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20 27 28 29 30 31	4.00 0		UserTest.01 John Graner	None	Su Hyour Park		00000	
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by <u>Francis Favorini</u> .	8:00 P	M						
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Book Null for both scan time and cleaning slot

Single Tech Scheduling Example...Saturday

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	11:0	MA OC			NOGGIN.01	10.00 AT 12.50 TH	NoTech.01	BrainSpine.01
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7 8 9 10 11 12 13			Anne Baker		Anne Baker 2:00 PM-4:30 PM	NoTech.01		
14 15 16 17 18 19 20	3:0	00 PM	2.00 PH-1.50 PH		2.00 PH-1.50 PH	Null.01		
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28 29 30 31	4:0	00 PM						
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by <u>Francis Favorini</u> .								
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Single Tech Scheduling Examples...Saturday

BIAC Scanner Schedule × +							∨ _ □ _ X	
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BIAC Scanner Schedule	Sunday 5/7/2023	Monday 5/8/2023	Tuesday 5/9/2023	Wednesday 5/10/2023	Thursday 5/11/2023	Friday 5/12/2023	Saturday 5/13/2023	
	Add item	Add item	Add item	Add item	Add item	Add item	<mark>.d item</mark>	
Experiment Info Page	8:00 AM							
MR Tech Schedule								
Scapper: BIAC5	9:00 AM	Null.01		Null.01	Null.01			
Start Time: 8:00 AM		NetTMS.01	Null.01	NetTMS.01	NetTMS.01			
	10:00 AM	Margaret McAllister 9:30 AM-11:00 AM	NetTMS.01	Margaret McAllister	Margaret McAllister			
Stop Time: 10:00 PM		5.50 APT11.00 APT	Margaret McAllister	Null.01	Null.01		Null.01	
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Update View			NCANDA.04	Jeffrey Browndyke 11:00 AM-12:30 PM	Victoria Swaine		00000	
	12:00 PM	NoTech.01	Casey Pearce 11:30 AM-1:00 PM	1110078712150777	Null.01			
5/7/2023 Today		None		Null.01	NoTech.01			
May 💙 2023 💙	1:00 PM	Null.01	Null.01	NoTech.01	Null.01	NoTech.01	Null.01	
SMTWTFS		ADRC.01	NoTech.01	Null.01		None	NCANDA.04	
1 2 3 4 5 6	2:00 PM	Emily Maingi	Null.01				Victoria Swaine	
7 8 9 10 11 12 13		Null.01						
14 15 16 17 18 19 20	3:00 PM	ADRC.01						
		Emily Maingi						
28 29 30 31	4:00 PM	Null.01						
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Into Missing Overlap								
Calendar version 1.7.15 [2022.03.16]	8:00 PM							
by <u>Francis Favorini</u> .								
	9:00 PM							

Scheduling a Test Room

To Schedule a Test Room...

- Same as Null.01 or a paid scan
- DO NOT need nulls for the test rooms
- Do not need to book within tech hours
- If no longer need slot, please cancel or delete scheduled time
- No fee for the rooms or a cancellation fee
- **Must complete calendar entries for all test rooms used for renewal as well**

BIAC Scanner Schedule

Experiment Info Page MR Tech Schedule



Schedule just like a paid scan

BIAC Scanner Schedule × +

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Tuesday 5/2/2023 **BIAC Scanner Schedule** Sunday Monday Wednesday Thursday Friday Saturday 4/30/2023 5/1/2023 5/3/2023 5/4/2023 5/5/2023 5/6/2023 Add item Add item Add item Add item no tech Add item normal tech coverage until 11 11-1 - 2 techs Experiment Info Page normal tech coverage after 2 MR Tech Schedule 8:00 AM Scanner: DHN1 V 9:00 AM Start Time: 8:00 AM Stop Time: 10:00 PM 10:00 AM CANDA.81 NetTMS.81 Casey Pearce Margaret McAllister BrainSpine.81 Update View 10:00 AM-11:30 AM Anne Baker 11:00 AM ALADDIN.81 5/2/2023 Today Rachele Brassard 12:00 PM 11:30 AM-1:30 PM May ✓ 2023 ✓ SMTWTFS 1:00 PM ALADDIN.81 1 2 3 4 5 6 Courtney Holland 7 8 9 10 11 12 13 2:00 PM UserTest.01 14 15 16 17 18 19 20 enneth Roberts IndBlast.81 21 22 23 24 25 26 27 Christine Baird 3:00 PM 28 29 30 31 2:30 PM-4:00 PM BrainSpine.81 Anne Baker 4:00 PM Free Slot Experimenters must complete all calendar entries for their experiments. 5:00 PM BrainSpine.81 Anne Baker Color Kev 6:00 PM Info Complete Cancele fo Missing Overlap 7:00 PM Calendar version 1.7.15 [2022.03.16] by Francis Favorini. 8:00 PM 9:00 PM

*Do not need a Null – just need to schedule the time you need

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Removing a scan

Cancelling and Deleting

Delete Study vs Cancel Study

Delete

- More than 48 hours before the scan's start time
- No cancelation fee
- Completely removed from calendar

Cancel

- Within 48 hours of the scan's start time
- Cancellation fee (\$140 an hour)
- Entry appears on the calendar in red

Deleting a Scan...



...Removes a scan from calendar completely

Cancelling a scan

Study Information × +			~ – @ X			
← → C ① biac-web.dhe.duke.edu/calendar/recdetail.asp?ScheduleID=153071						
Study Details						
Experiment Info Page for Demo.01						
Schedule ID 153071		Study ID 230501_01220	Scheduled Times 5:00 PM - 6:00 PM			
Scanner *First Frem	BIACS V	*Experiment Demo.01	*Experimenter None			
Subject	,	Change Subject	*Subject Type None			
Consent Form Signed	a 🗸 🗸		*Amount Paid \$ 0.00			
*Problem	None 🗸	Completed 🧹	Lost Time 0 minutes			
Problem Details	None Other_Problem					
Notes	Started_Early , Started_Late Finished_Early Subject_Problem					
*Required fields.	Subject_Incident					
Save Don't Save Cancel Study Delete Stu	Prior_Scan_Ran_Over BIAC_Equip_Error Scanner Error					
Pregnancy Test	Scanner_Down Severe_Weather					
No subject						

Step I) Need to select a problem from the dropdown – be as accurate as possible

Cancelling a scan



Step 2) Type in problem details

Cancelling a scan



*Must click "Cancel Study" – Clicking "Save" will not cancel the scan **If canceled – will appear red on the scanner schedule

Cancelling a scan – Subject Problem

- All problems involving the subject are a subject problem
 - Examples:
 - No shows or last minute cancellations
 - Implant not cleared and could not be scanned
 - Claustrophobia
 - Did not fit in the scanner
- Please be as accurate as possible and do not list subject problems as "Other Problem" or "Scanner Error"

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 MockI, TestI, DHNI, and DAVI?
 - Those entries <u>still</u> need to be completed!

*Incomplete calendar entries will cause your BIAC experiment to be ineligible for renewal

Calendar Items

Completed before the scan

- Actual Start and End Times
- Experimenter
- Subject Name**
- Subject Type

Completed after the scan

- Exam Number(s)
- MR Tech
- Consent Form Signed
- Problem (if applicable)
- Lost Time (if BIAC problem)
Calendar Entries: Completed Items



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: Problems

- Most Common:
 - Subject Problem

- Are not charged for:
 - No Tech
 - Scanner Error
 - BIAC Equipment Error
 - Scanner Down
 - Severe Weather

Schedule ID	153071	
Date	5/1/2023 Monday	
Scanner	BIAC5 🗸	
*First Exam #	01220	
Subject		
Consent Form Signed		~
*Problem	None 🗸	
Problem Details	None Other Problem	
Notes	Started_Early Started Late	
	Finished_Early	
ancel Study Delete Stu	Subject_Incident No_Tech Prior_Scan_Ran_Over	Lin Cancel Study
Jancel Study Delete Stu	BIAC_Equip_Error Scanner_Error	on-cancer study
	Scanner_Down Severe_Weather	

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 <u>BIAC-related</u> 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

Scheduled Times 5:00 PM - 6:00 PM	
*Actual End Time 6:00 PM 🗸	
*Experimenter None	~
*MR Tech Jenn 🖌	
*Subject Type Phantom 🗸	
*Amount Paid \$ 0.00	
Lost Time 0 minutes	



 Trouble tickets can be submitted by clicking on the "Services" tab on the BIAC Homepage or by visiting <u>www.biac.duke.edu/services/</u>

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	Calendar Directory Volunteer
Duke-UNC Brain Imaging and Analysis Center	Search Q
About Us 🔻 Research 👻 Education 👻 People 👻 Facilities 👻	Services
☆ Services	
Scanner Calendar Trouble Ticket	LOG UIO1 MESSAGE UIO1 MESSAGE Image: Comparison of the second

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
 - MockI/TestI/DHNI/DAVI entries are not completed

Policy on Excessive Scheduling Errors

- If a user/scheduler fails to schedule Null.01 during single tech coverage or schedules all/part of their session outside of the normal or posted tech hours the following will happen:
 - Ist Offense: Scheduler gets notified about the policy and New User Orientation.
 - 2nd Offense: MR Operations Director, Dr. Todd Harshbarger, notifies the Scheduler and the Responsible PI about the severity of the situation, the second offense, and that on the third offense scheduling rights will be taken away.
 - 3rd Offense: BIAC Director, Dr. Allen Song, notifies the Scheduler and the Responsible PI that the third offense has occurred and that the scheduler's scheduling rights have been removed.

Protocol Planning

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!
- We highly recommend scheduling a UserTest.01 prior to your first participant!

Scan Session: Planning your Time

- A scheduled session must include:
 - (I) 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

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 (ex. 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 and get a partial cancellation fee back
 - 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
 - BIAC is not responsible for artifacts related to subject motion

Participant Screening and MR Safety

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 the MRI Techs at least 48 hours before the scan

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
 - 1. May require obtaining medical record authorization to review make and model of any implanted metal or part of medical history
 - 2. 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)
 - 3. 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: Initial Contact

Good morning/afternoon, my name is Marissa Bruce and I'm calling from the Duke Brain Imaging and Analysis center. Are you free now to hear more about our studies?

Great. Would you be free to do the phone screening now?

If no. Is there a better time for you to do the phone screening?

Part II: BLAC Research Summary

If yes,

Our research uses functional magnetic resonance imaging to take pictures of your brain while you are doing a psychology experiment. We study the areas of the brain associated with things like memory, attention, and perception. We have a number of studies going on at any one time, and our studies are conducted at the MRI center at Duke Hospital.

If you participate in our studies, you will come to the MRI center and lie down on your back in a MRI machine (which is like a small open-ended tunnel)

The machine uses radio waves to take the pictures of your brain. The radio waves and magnetic fields used in MRI are not themselves harmful, but they do pose a risk in some cases, such as if you have a pacemaker.

Most studies take between 1-2 hours, and pay about \$20 per hour, but the duration and payment depends on the particular experiment. Are you still interested in participating?

In order to participate and be entered into our database (so that you can be contacted for our studies), the first step is a 5-10 minute phone screening and the second step is to come into the Duke Children's Hospital for a one hour compensated in-person screening. You will receive \$20 and a parking pass for the hospital garage. During the screening, we will collect a health history, have you fill out some questionnaires to see if you are eligible for our studies, and conduct an MRI simulation. Would you be interested in this screening?

Thank you for taking the time to reach out to us and have a great day!

Part II: Screening Questions

If yes,

Before you can participate in the in-person screening, I need to go over a set of questions with you. If you do not want to answer a question, you do not have to answer it, but then you will not be able to participate.

1. Have you done any previous MRI studies or ever been in a MRI scanner?

"Yes". Ask the subject when and where the session was conducted. Note: prior participation in MRI does not ensure safety! "No." Be especially careful with any subject who has not been in the scanner.

Revised: 03/04/2019

2. Do you have any of the following metal objects in your body?

- Implants: pacemakers, cochlear/car, insulin pump, etc.
- Fragments: metal working, bullet/shrapnel, etc.
- "Yes". If they have any implanted metal, then they should not participate in the study or go into the scanner room without approval from Dr. Song. Remember, the scanner room itself can be a dangerous environment for subjects
- with implanted metal (e.g., pacemakers), so it is important to screen these subjects ahead of time. [STOP

SCREENING - CANNOT PARTICIPATEI

3. Do you have any of the following metal objects in your body?

a. Surgical: pins in bones, clamps, valves, catheters, etc

"Yes". Inquire about the type of implant and the type of metal. If they have any implanted metal that is not MRcompatible then they should not participate in the study or go into the scanner room without approval from Dr. Song. Remember, the scanner room itself can be a dangerous environment for subjects with implanted metal (e.g., pacemakers), so it is important to screen these subjects ahead of time.

4. Have you ever worked with metal (e.g. grinding, fabricating)

"Yes". Ask the subject if he or she was ever around metal shavings. If "Yes". fSTOP SCREENING - CANNOT PARTICIPATE1

5. Have you ever had an injury to the eye involving metal or invasive eye surgery? "Yes" [STOP SCREENING CANNOT PARTICIPATE]

6. Are you pregnant or think you may be pregnant? (women only) "Yes" [STOP SCREENING - CANNOT PARTICIPATE]

Do you have any permanent makeup or tattoos? "Yes". [STOP SCREENING – CANNOT PARTICIPATE; tattoos below the neck are ok]

8. Do you have any body piercing that cannot be removed? "Yes" ISTOP SCREENING - CANNOT PARTICIPATEI

"No. I have piercings but they are removable." Tell the subject that they should leave all piercings and jewelry at home, or in lockers outside the MR center.

The following questions may preclude the subject's participation in some studies, or may suggest some potential problems;

9. Do you have dental braces, dental implants, or a permanent retainer?

"Yes, I have permanent metal dental work." We currently do not run subjects with permanent dental work because of the potential for an imaging artifact. In addition, some permanent retainers are held in place by magnets

"Yes, but it is removable." All removable metal dental work should be removed before entering the MR room. "Are fillings OK?" Gold and silver fillings are OK for entering the seanner room.

10. Do you feel anxious in small spaces? Would you classify yourself as being elaustrophobic? (*emphasize*) "Yes". Explain the MR environment to them, and describe the study. Tell them that they will in the scanner bore for at least 90 minutes, but will be able to talk with the experimenters in the next room. Let the subject make a

decision about whether to participate.

11. Do you use any prescription medications, for example, anti-depressants, anti-anxiety or any hypertension medications?

Because of the potential effects of some medications upon brain neuronal activity and blood flow, we also ask subjects about the drugs they might be taking

Revised: 03/04/2019

Part III: Result of Phone Screening

If they qualify, That is all of the questions. At this point, if you are still interested, we can schedule you for a visit to our MRI facility at Duke for the in-person screening.

If they do NOT qualify,

Unfortunately, you are not eligible to participate in our MRI studies. Because these studies are for research and of no medical benefit to you we must take additional precautions to ensure your safety. If you have any further questions or concerns, you can contact our director. Dr. Allen Song at 681-9337.

Part IV: Voicemail

Hello

This is Marissa Bruce from the Brain Imaging and Analysis Center at Duke. I am calling to conduct a quick 5 minute phone screening to see if you are eligible for our studies. If you would like, please give us a call back at 919.681.9344 any time Monday through Friday between 8am-4:30pm. If you prefer, please send an email to volunteer at b-i-a-c dot duke dot edu. That is v-o-l-u-n-t-e-e-r at b-i-a-c dot duke dot edu. Thank you for your time!

Revised: 03/04/2019

Examples of Pre-Screening Resources

BIAC MRI Safety Screening Form

Date:

Duke-UNC Brain Imaging and Analysis Center:

Protocol

MRI Safety Screening

Exam Number:

All individuals entering the MRI suite must fill out this information to the best of their knowledge. Any potential contraindications must be reviewed with the individual's medical record and the BIAC MR Safety Committee before being cleared to enter the scamer bore.

Part I: For all individuals entering the scanner room

Name				Birthda	te			
Last name		First name	M.I.					
Address				City				
State Z	p Code	_ Phone (H)()	(W)()	(C)(_)		
1. Have you ever	had an injury to th	e eye involving a metallic ob	ject			🗆 No		Yes
(e.g. metallic sliv	ers, shavings, forei	gn body)?						
If yes, ple	ase describe:							
2. Have you ever	worked with meta	(grinding, fabricating, etc.)?				🗆 No	Ш	Yes
If yes, ple	ase describe:							
3. Have you ever	had surgery (inclu	ding eye surgery)?				🗆 No		Yes
If yes, plo	ase describe:							
4. Have you had a	iny previous MRI	studies or been in a MR scan	ner?			🗆 No		Yes
If yes, plo	ase list (most rece	nt first): Body part	Date		Facility_			
If yes, die	l you have any pro	blems?						

Before you may enter the scanner room, you must remove all metallic objects.

All contents of pockets, including back pockets	Shoes that contain any metal (e.g., steel tipped)
Wrist watch, any bracelets	Hearing aids or other electronic devices
Hair pins, clips, weaves, fasteners	Pagers, cell phones, PDAs
Pins or badges on shirt	Dentures or removable retainer
Belt with metal (e.g., buckle)	\Box Necklaces, chains

Part II: For all individuals entering the scanner bore

Revised: 7/28/2017	Page 1 of 3	
5. Please list any surgeries or other invasive medical procedures in as much detail as possible:		
4. Do you currently have a fever or other acute illness?	⊐ No	$\Box \mathbf{Y}$
3. Are you pregnant, experiencing late menstrual period, or undergoing fertility treatment?	□ No	ΠY
2. Do you have an IUD or diaphragm containing metal?	□ No	∃ Ye
1. Are you claustrophobic?	□ No	$\Box Y_{0}$

	Protocol:	Exam Number:	Date:		_	
6. Are you current	tly taking or have you recently take	en any medication?			No	□ Yes
If yes, please list						
7. Do you have an	remia or any diseases that affect yo	ur blood?		1	No	Yes
lf yes. please desc	rihe			_		
 Do you have a l 	history of stroke, seizures, brain tu	mor, head trauma, or other neurological	disorder?	- :	No	- Yes
lf ves, please desc	ribe			_		
9. Do you wear gl	lasses or contact lenses?			-	No	∃ Ye
If yes, please spec	ify prescription (if known)					
10. Do you have a	1 breathing disorder (e.g., asthma, a	npnea), heart condition, or movement di	sorder?	L	No	_ Ye
llaiobt	Weight	Handednes	-			





	Protocol: Exam	Number:	Date:
Please indicate i	f you have any of the following:		
Yes No Yes No	Aneurysm clip(s) Cardiac pacemaker Implanted cardioverter defibrillator (ICD) Electronic implant or device Magnetically-activated implant or device Neurostimulation system Spinal cord stimulator Internal electrodes or wires Bone growth/bone fusion stimulator Cochlear, totologic, or other ear implant Insulin or infusion pump Implanted drug infusion device Any type of prosthesis (eye, penile, etc.) Heart valve prosthesis	If needed, plc detail any add potential met your body:	ase use this space to describe in fitional information related to al fragments or implants in or on
Yes ⊔ No Yes □ No	Eyelid spring or wire Artificial or prosthetic limb		RTANT INSTRUCTIONS
Yes No Yes No Yes No Yes No Yes No Yes No Yes No Yes No Yes No Yes No Yes No Yes No Yes No Yes No Yes No Yes No Yes No Yes No Yes No Yes No Yes No Yes No Yes No Yes No Yes No Yes No Yes No Yes No Yes No Yes No Yes No	Metallic steri, filter, or coil Shunt (spinal or intraventricular) Vascular access port and/or catheter Radiation seeds or implants Medication patch (Nicotine, Nitroglycerin Any metallic fragment or foreign body Wire mesh implant Tissue expander (i.e. breast) Surgical staples, clips, or metallic sutures Joint replacement (hip, knee, etc.) Bone/joint pin, screw, nail, wire, plate, etc Dentures or partial plates	Before enter system roon objects inel partial plat beeper, hain piercips, cards, mag pocket knif with metal metallic thr ear plugs to sean.	ing the MR environment or MR in, you must remove all metallic uding hearing aids, dentures, s., keys, cell phone, eyeglasses, pins, barrettes, jewelry, body ewelry, watch, safety pins, money clip, credit cards, bank netic strip cards, coins, pens, e, nail clipper, tools, clothing, fasteners, and clothing with eads. You will be asked to wear protect your hearing during the
Yes □ No Yes □ No Yes □ No	Body piercing or jewelry Hearing aid (remove before entering MF Other implant	Please cons Radiologist RI) concern BEI room.	ult the MRI Technologist or if you have any question or FORE you enter the MR system

I attest that the above information is correct to the best of my knowledge. I read and understand the contents of this form and had the opportunity to ask questions regarding the information on this form and regarding the MR procedure that I an about to undergo.

Signature of Person Completing Form		Signature of Person Screening Subject/Patient	Date
	Form Completed by: Self	. Parent/guardian . Other relative . Physician	
Revised: 7/28/2017			Page 3 of 3



MR Safety: Zones



Zone I

 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

MR Safety

- 24 hrs/day
- 365 days/year
- The magnetic field is on even when the magnet is <u>NOT</u> in use.
- Even if the electrical portion of the machine is off, the magnetic field is still up
- The MRI 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 #I Concern!

MR Safety: Medical Implants

- Medical Implants
 - Review Dr. Frank Shellock's MRI contraindication database: <u>www.mrisafety.com</u>
 - At least 3 days before your exam, email the device model and manufacturer of any medical implants to all 3 techs at <u>BIAC-Schedule@duke.edu</u>
 - They will reply via email regarding eligibility
 - It is the <u>Experimenter's</u> responsibility to get approval prior to the scan!



MR Safety: Pregnancy Tests

- Although BIAC no longer requires pregnancy tests, many studies still have this requirement in their IRB procedures.
- Female participants (12-55 years) must receive a urine 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



Pregnancy Test Stations





Pregnancy Tests Update

- Since February, 2023, BIAC no longer requires pregnancy tests, so it is now up to each study to keep or get rid of this requirement
- If the study no longer wants to require pregnancy tests, then they must submit an amendment to their IRB
- If the study would like to continue requiring pregnancy tests, BIAC will still provide kits and testing

What to expect the day of the scan...

Day of Scan Procedure

Step I: 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 child bearing 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 I, DHN I, or Mock I
 - Parent/guardian can wait in the Children's Hospital Lobby or the Main Entrance Lobby
- CANNOT leave family/visitors:
 - In the hallway
 - Console room



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 Test I/DHNI/Mock I* and wait in those rooms
- Please do not wait in the hallways
- Scans are <u>not</u> allowed to run over the scheduled time

Scan Session: Experimenter Courtesies

- Do NOT train/consent/test subjects in the hallways
 - This includes the 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 nonstandard configuration, please make sure that you have returned everything to standard configurations
- Fill out the sanitization sheet

SANITIZATION SIGN OFF SHEET

Please use the supplies provided to sanitize any surfaces used during your scheduled time.

After sanitizing the space, please complete this log (with your own pen):

DATE	TIME SANITIZED	STUDY NAME	EXPERIMENTER NAME (PRINT)	EXPERIMENTER INITIALS
7/19/2020	5:00 PM	Sample.01	Amanda Griffin	aeg

BIAC Resources

BIAC Resources: Stimulus Controls

• We have many peripherals available for you to use!

 Details instructions can be found here: <u>https://wiki.biac.duke.edu/bia</u> <u>c:experimentalcontrol</u>

Table of Contents **BIAC Stimulus Control System Manual** BIAC Stimulus Control System Manual Stimulus Control System Stimulus Control System Layout Layout Video display Organization diagram Audio Hardware connected to each PC EyeTracker Galvanic skin resistance (GSR) Video display Button Boxes Head Tracking Device Troubleshooting Using the video projector Using the DVD player Using the Video switch Using the Monitors Audio Using the audio headphones EyeTracker Evetracking in the MRI scanner Galvanic skin resistance (GSR) Recording GSR in the MRI scanner Button Boxes Using the 8-button box Using the joystick button box Head Tracking Device Using the head tracker Troubleshooting Troubleshooting

BIAC Resources: Subject Recruitment

- BIAC maintains an active subject pool (~425 members)
- Healthy, "Normal" participants
- <u>Criteria:</u>
 - I8-80 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

**Currently not recruiting, but can still use


BIAC Resources: Using BIAC 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.
- Please 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 laying still
 - Dental work may produce image artifacts

- 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 <u>must</u> 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

- Invoices are sent to the following 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 <u>billing@biac.duke.edu</u> 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.
- Updating calendar entries regularly will avoid the need for corrections on the invoices.

BIAC Scanne	r Time	Invo	ice			
Please remit payment to: Center Attn: Billing Campus Box 3918 Durham, NC 27710	Brain 919-6 billing	Imaging 581-7033 g@biac.du	and Anal Fax ıke.edu	ysis	919-681	L-9337
Department BIAC						
Responsible Investigator	Alle	n Song	allen.so	ng@dı	ıke.edu	
Billing Contact Elena Musty	elen	a.musty	@duke.	edu		
Experiment	Cost	Object :	Investi	gato		
Scanner Date Start End Exam(s) Car	nceledLost Tim	eOverlap Credit	Amount Billed	Paid to . Date	Amount Due	
Current Charges BIAC6 15-Apr-2019 2:30 PM 3:00 PM 00606 BIAC6 25-Apr-2019 3:30 PM 4:30 PM 00645	No 0 min. No 0 min.	0 min. 0 min.	\$280.00 \$560.00	\$0.00 \$0.00	\$280.00 \$560.00	
Current charges through 4/30/2019 (2 st Past Due charges (0 studies) Development funds contributed by BIAC	udies)			\$	\$840.00 \$0.00 \$0.00	
Total for (2 studies)				\$	\$840.00	
Current charges through 4/30/2019 (2 stud Past Due charges (0 studies) Development funds contributed by BIAC	lies)			\$	\$840.00 \$0.00 \$0.00	
Total for Allen Song (2 studies)				\$	840.00	

- 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

- Rates Effective July 1st, 2023:
 - Rate for Scans = \$640 per hour
 - Cancellation Fee Rate = \$160 per hour

BIAC Billing System: Helpful Definitions

- 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.
- 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





 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. 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.



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



 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.



 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?



 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...

- (I) 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) Email completed forms to <u>help@biac.duke.edu</u> and Jenn Graves, jenn.graves@duke.edu
- (7) Email <u>help@biac.duke.edu</u> with your Duke Unique ID and your HID-Activated Card Number
- (8) Join the BIAC-User listserv

Forms and Safety Quiz

- Found at <u>https://www.biac.duke.edu/research/safety</u>
- Can email the forms to jenn.graves@duke.edu

Safety

If you need access to the MRI suite, you must review the MRI safety materials and pass the safety quiz to demonstrate your understanding of the material covered. You must also complete, sign and date the MRI Screening Form and Level 1 MRI Access Signature Sheet and return them to the <u>BIAC Main Office</u>.

- SOP101: MRI Access
- SOP111: BIAC Safety Training
- MRI Safety Tutorial
- <u>MRI Safety Video</u>
- <u>MRI Safety Quiz</u>
- MRI Subject Screening Form (PDF)
- MRI Level 1 Access Signature Sheet (PDF)

BIAC User Listserv

- Join to stay up to date and receive any notices, policy changes, etc.
- To join:
 - Go to <u>https://lists.duke.edu/sympa</u>
 - Log in with Net ID and click "Search for lists"
 - Search "biac" and click the group <u>biac-users@duke.edu</u>
 - On the left side of the page, click "Subscribe"

biac-users - For anyone who uses the services of the Brain Imaging & Analysis Ctr.

biac-users@duke.edu

Subject: For anyone who uses the services of the Brain Imaging & Analysis Ctr.

Description: This list is for researchers who use the BIAC facilities. Operational announcements, service interruption notices, talk announcements, and other important messages that affect the general BIAC community will be sent through this listserv.



Thank you for attending the BIAC New User Orientation!

