## THE UNIVERSITY BMISR

## Actigraph device setup and data downloading

- <u>For the GT3X+ device</u>: Remove cap from the GT3X+ device by using the red pick. **NOTE: Be very** careful with the connector cap.
- Connect the GT3X+ device to the small end of the USB cord and connect the large end of the USB cord to the computer USB port.
- <u>For the Link</u>: Connect the Link to the Dock Station. Insert USB cord to back of Dock Station and Computer USB port





- Open ActiLife by double clicking on
- The GT3X+ device will appear on the screen: The status should state 'finished detecting'. To download the information from the device, click the 'Download' button at the top of the screen.

) ActiLi	fe v6.11.8 - 1	Device Connected	_		_		Income N	Manager Street West
File	Edit Tools	Help						
Device	s Wear Ti	me Validation Scori	ng Sleep PLN	A Graphing N⊦	IANES GPS	Feature Extraction St	udies Data	Vault
	Initialize	- Download	🔁 Refresh	😂 Refresh A	All 🔦 Io	dentify Advanced -		
<b>V</b>	Device	Seriel #	Subject Name	Status	Firmware	Battery	Total Memory	Current Data Recorded
<b>v</b>	GT3X+	NEO1E44110118	Dog_Study_0002	finished detecting	3.2.1	ገ 4.11V (93% Charging)	512 MB	7D 14H 59M 0S

- The 'Download Options' dialog box will appear. First, click 'Change Location' to select the location for the file.
- Select your preferred 'Downloading Naming Convention'.
- Ensure that the 'Create AGD File (GT3X+)' is selected. Keep 'Epoch' at 10 seconds and '# of Axis' at 3. Select 'Steps', 'Lux', 'Inclinometer', and 'Low Frequency Extension' (all checked).
- When finished, click 'Download All Devices'.

Download Options									
C:\Users\shipleyj\Do	ocuments\ActiGraph\ActiLife\Downloads								
Lice of Default Do	wnload Directory	nload Directory							
Download Naming Convention	Download Options								
Serial Number> < Download Date>	Create Clinical Report on Download for ActiSleep Monitor(s) edit options								
Serial Number> < Start Date>	☑ Create AGD File: (GT3X+)	Create AGD File: (GT3X+)							
Subject Name> < Download Date>	Epoch: 10 🔹 seconds	Epoch: 10 veconds							
Serial Number	# of Axis: 3 • G Select 1 sec for PLM analysis	Axis 2							
<ul> <li>Subject Name</li> </ul>	Stars I Luy I Inclinemeter I Low Freewood States	X83							
Prompt for Each Download	Steps V Lux V Inclinometer Cow Frequency Extension	J							
Concatenate Custom Fields									
Add biometric and user information	E Download A	All Devices							
Serial Number Subject Name Gender	r Feet Inches (Ibs) Birth Race	Limb							
NEO1E44110118 Dog_Study_0002 Female	▼ 5 ▼ 0 ▼ 151 1/1/1949 1:36 PM White / Caucasian	▼ Waist ▼							
۲ [	III								

• You can check the progress of the download by looking at the 'Progress' bar.

Devices	Wear T	ime Validation	Scoring Sleep	PLM Graphing	NULLANIES		
			<u> </u>	TEM Graphing	NHANES (	GPS Featu	re Extraction Studies
Init	tialize	- Down	load 🛛 🗇 Refr	esh 🛛 😓 Refree	sh All	Identify	Advanced -
	Device	Serial #	Subject Name	Status	Progress	Firmware	Battery
GT3	3X+	NEO1E44110118		downloading RAW		3.2.1	🥫 4.11V (93% Charging)

• The Status will say 'finished downloading' when the download is complete.

) ActiLi	fe v6.11.8 - 1	Device Connect	ed	_						-	
File I	Edit Tools	Help									
Device	s Wear Ti	ime Validation	Scoring	g Sleep	PLM	Graphing	NHA	NES GPS	Featu	ire Extraction	Stu
	Initialize	- 💽 Dov	wnload	参 Re	fresh	😂 Refre	esh All	Id 🔦 Id	entify	Advance	ed -
<b>V</b>	Device	Serial #		Subject Name	Γ	Status		Firmware		Battery	
<b>V</b>	GT3X+	NEO1E441101	18			inished download	ing	3.2.1	<b>i</b> 4.11	V (93% Chargir	ng)

• To create a Clinical Report, double click on the RAW file in the folder. The RAW file is the file with the Red Box.

Name	Date modified	Туре	Size
NEO1E44110111 (2015-05-05)	5/5/2015 1:15 PM	ActiLife GT3X File	34,178 KB

• The ActiLife software will open, along with the 'Export Raw Data Files' dialog box. At the bottom right hand corner of the dialog box, click 'Export RAW Files'

) Export Raw Data Files		inge oelee		uuy										
Add RAW Files and Create Epoch Data         Add Dataset(s)       Remove Selected         Remove All       Create Sub Folders for Exported AGD/CSV/DAT files         Image: Selected       When Exporting to RAW epoch length, columns are now formatted to "X,Y,Z"														
Data Set	Open Containing Folder	Epoch Lei	ngth	Create AGD	Create CSV	Create DAT	# of	Axis	Steps	Lux (if available)	Inclinome (if availab	ter le)	Heart Rate (if available)	Low Frequency Extension
Apply To All Datasets		10 sec	•	<b>V</b>			3	•	<b>V</b>	<b>V</b>	On - Waist	•		
TAS1D50140286_201	open folder	10 sec		<b>V</b>			3	-	V	<b>V</b>	On - Waist	-		
Adjust timestamps to:	Subject's Lo	cal Time Z	one	✓ (only for	r files from St	udy Admin)								
Files in Grid: 1													Ex	port RAW Files

• This box will open when exporting is complete. Click 'Ok'.

() ActiLife	
Exporting Complete Finished Exporting	
	ОК

• Safely eject the Link USB cord by clicking on the arrow on the bottom right hand corner of the



desktop, click on and click on the name for the Link.



• If ActiLife is not currently open, double click on

• On the main screen, click on Tools  $\rightarrow$  Generate Clinical Report (PDF)



• Click 'Select AGD File'

C Export Clinical Report
Select File and Options
Select AGD File      Existing wear time validation periods and sleep bed times will NOT be overwritten.
Wear Time Validation
✓ Wear Time Validation Page Troiano Default
Data Scoring Algorithms
Energy Expenditure Page     Freedson Combination (1998)
✓ Cut Point Page Freedson Adult (1998)
✓ METs Page Freedson Adult (1998)
Use Log Diary Entires (if available)
Sleep Options
Sleep Graph Page Sadeh  Sleep Table Page
Additional Pages
☑ Title Page
☑ Interpretation Page
Create Clinical Report

• Select the file you would like to use from the folder. Double click on the file name.

• A screen will appear that says:



- Click 'Reintegrate File'.
- The file name should appear at the top of the 'Export Clinical Report' dialog box. At the bottom right hand corner, click 'Create Clinical Report'

Wear Time Validation           Wear Time Validation Page	Troiano Default 🔹
Data Scoring Algorithms	
📝 Energy Expenditure Page	Freedson Combination (1998)
🔽 Cut Point Page	Freedson Adult (1998) 👻
METs Page	Freedson Adult (1998) 👻
Use Log Diary Entires (if ava	ilable)
Sleep Options	
👿 Sleep Graph Page	Sadeh 👻
🔽 Sleep Table Page	
Additional Pages	
🔽 Title Page	
Interpretation Page	

• Click 'Open Clinical Report'



• A PDF of the Clinical Report will open.

## **ActiLife Initialization Procedure**

- Remove cap from the GT3X+ device by using the red pick. . **NOTE: Be very careful with the connector cap.**
- Connect the GT3X+ device to the small end of the USB cord and connect the large end of the USB cord to the computer USB port.



- Open ActiLife by double clicking on ActiLi
- The GT3X+ device will appear on the screen. Make sure the box is checked. Click 'Initialize' to begin initialization of the device.

) ActiL	ife v6.11.8 - 1	Device Connect	ed						
File	Edit Tools	Help							
Device	es Wear Ti	ime Validation	Scoring	Sleep	PLM Graphing	NHANES	GPS Featu	re Extraction	Stu
	Initialize	- 💽 Dov	vnload	👶 Refre	sh 🛛 😴 Refre	esh All 🛛 🔌	Identify	Advance	d -
<b>V</b>	Device	Serial #		Subject Name	Status	Firmware	2	Battery	
	GT3X+	NEO1E441101	28		finished detecting	3.2.1	🣋 3.95V (7	75% Charging)	5

• Select 'Regular Initialization'. \*Important: Device must have a charge above 80% to initialize.\*



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- An 'Initialize Devices' dialog box will open.
- Select the 'Start Time' by clicking on the calendar icon and clock icon. Select the box to 'Use a Stop Time' and select the 'Stop Time' using the calendar icon and clock icon.
- Select a 'Sample Rate' of 30 Hz.
- Uncheck the boxes for 'Delay Mode LED' and 'Data Collection LED'.
- Select 'Enabled' for 'Idle Sleeping Mode'.
- When finished, select 'Enter Subject Info' at the bottom of the screen.

(3) Initialize Devices	
Choose Initialization Parameters for 1 Device	
Select Start Time: 6/11/2015 9:00 AM S Default Use Stop Time? 6/18/2015	11:59 PM
Device Time: 6/8/2015 10:15:38 AM Use Local Computer Time 🔹 🕐 👔 Devices will continue collecting data until t	he battery dies.
GT3X+ (1)	
Sample Rate: 30 Hz 💌	Axis 1
LED Options     Delay Mode LED Data Collection LED	Athen 2
Recording Options	
	Enter Subject Info

- Do not change the 'Serial' number.
- Enter the 'Subject Name'.
- Select a 'Gender'.
- Select the 'Height (ft)'.
- Select the 'Height (in)'.
- Enter the 'Weight (lbs)'.
- Enter the 'DOB'.
- Select the 'Race'.
- Select the 'Limb' as 'Waist'.
- Select the 'Side' on which the device will be worn.
- Select the 'Dominance' of the 'Side' selected.

Choose Initializatic	on Parameters	for 1 Dev	ice							
Select Start Time: 6/11	L/2015	9:00 AN	0	Default	Use Stop Tir	me? 6/18/2	015	11:59 PM	$\textcircled{\textbf{S}}$	
Device Time: 6/8/2015	5 10:26:25 AM Use	Local Com	puter Time	• ?	Devices	will continue co	ollecting data until t	he battery die	·S.	
Serial	Subject Name	Gender	Height (ft)	Height (in)	Weight (lbs)	DOB	Race	Limb	Side	Dominance
NEO1E44110128		Male 🥖	5 🥖	10 🥖	186 📃		White / Cauca.,/	Waist 🥖	Right 🥖	Dominant 🔹

• When finished, click 'Initialize 1 Device'.

hoose Initializat	ion Parameters	for 1 Dev	/ice							
elect Start Time: 6/	11/2015	9:00 AN	1	Default	🔽 Use Stop Ti	me? 6/1	8/2015	11:59 PM	0	
evice Time: 6/8/20	15 10:30:01 AM Us	e Local Con	nputer Time	•	① Devices	will continu	e collecting data until	the battery	dies.	
Serial	Subject Name	Gender	Height (ft)	Height (in)	Weight (lbs)	DOB	Race	Limb	Side	Do
NEO1E44110128		Male 🥖	5 🥖	10 🥖	186 🥫		White / Cauca.	Waist	🥒 Right 🤞	Do
				III						
Use Serial as Subject	Name	Reset	to Device Parar	meters 🛛 🗱 C	lear					

• When initialization is complete, the 'Status' bar will state 'finished initializing'.

) ActiL	ife v6.11.8 - 1	1 Device Connect	ed	-						
File	Edit Tools	Help								
Device	es Wear T	ime Validation	Scoring	Sleep	PLM	Graphing	NHA	NES GP	S Feat	ure Extraction S
	Initialize	- 💽 Dov	vnload	👶 Ref	fresh	😂 Refre	esh Al	ا 🔦 ا	dentify	Advanced -
<b>V</b>	Device	Serial #		Subject Name		Status		Firmware		Battery
V	GT3X+	NEO1E441101	23		fin	ished initializing	9	.2.1	🣋 4.15V	(98% Charging)

• The boxes on the main screen now reflect the data you entered on the 'Initialize Devices' dialog box.

and the second value of th	State of Street, or other	-			_			
udies Data	Vault							
Total Memory	Current Data Recorded	Mode(s)	Epoch / Sample Rate	Start Date & Time	Stop Date & Time	Filter	Axis Enabled	More Info
512 MB	0S	© 📌 💡 ⊾₂ <sup>z</sup>	30 Hz	6/9/2015 4:00 PM	6/17/2015 11:59 PM	N/A	3	More Info

• Disconnect the device by performing 'safe eject' and unplugging the USB cable.

## NOTE:

Be very careful with the connector cap. Make sure that you do not crossthread when you replace the cap. Do not over-tighten the cap. Placing Files in ActiGraph Data Vault

• Click on Data Vault at the top of the ActiLife home screen

🔇 ActiLife v6.11.7 - No De	vices Connected									_ <b>D</b> X
File Edit Tools H	elp									
Devices Wear Time	alidation Scorin	g Sleep	PLM	Graphing	NHANES	GPS	Feature Extraction	Studies	Data Vault	
ArtiGraph	ActiGraph I Use the Data Vaul from your Data V. access to your Da	Data Vault to store and p ult at any time ta Vault.	rotect your	r collected data mbers of your <u>c</u>	a. Retrieve files group have	Your 20GB F Memb	Vault Plan Free Online Storage er since 5/5/2015	19.98	GB free of 20 GB	

• To create a new folder, click 'New Folder'

📴 New Folder	P	Move	$\bigcirc$	Add File(s)

- Type the Folder Name
- To add a file to the folder, double click on the folder

🗁 LIVES	admin@CPH-GARCIA	5/12/2015 11:18 AM	Sub-Folder	
🛅 Test #1	admin@CPH-GARCIA	5/12/2015 11:24 AM	Sub-Folder	

Click 'Add File(s)'

📴 New Folder	Move	C Add File(s)

- Find the appropriate file, click on the file and click 'Open' at the bottom of the dialog box.
- The Data Vault will show the uploading status



• When the file is uploaded completely, the upload bar will disappear.