

# High Field Magnetic Resonance Imaging Center

Research MRI Suite, Basement Floor of Building 203  
VAMC 4150 Clement Street, San Francisco, CA 94121



THE CENTER FOR  
**IMAGING** OF  
**NEURODEGENERATIVE**  
DISEASES

Return application or direct questions to:  
Katherine Wu, CIND Imaging Core Supervisor  
Katherine.Wu@ucsf.edu  
(415) 221-4810 x2-6472  
Fax: (415) 379-5648

## MR STUDY APPLICATION for Research Users

Application date:

### PRINCIPAL INVESTIGATOR

Name:	Dept:
Address:	
Phone:	Email:

### STUDY

Study Title:	
Study Nickname:	
Proposed start date:	Proposed end date:
Study Disease:	

### GRANT INSTITUTION / FUNDING SOURCE - Check all that apply.

*If applicable, please attach a copy of your PO.*

<input type="checkbox"/> VA	PO#:		
<input type="checkbox"/> NCIRE	PO #:	Project #:	
<input type="checkbox"/> UCSF	PO #:	Project #:	Dept. ID #:
<input type="checkbox"/> Other	Bill To:	Address:	
		Phone:	Email:

Funding expiration date:

<input type="checkbox"/> Unfunded	Potential Funding Source:	Estimated Start of Funding:
	Estimate of Use: _____ hr(s) per _____	Annual Ceiling Amount: \$ _____

### CO-INVESTIGATOR(S)

Name:	Dept:
Phone:	Email:
Name:	Dept:
Phone:	Email:

**SCAN TECHNICIAN(S) / OPERATOR(S)**

Who will conduct your scans? *Check one.*

- CIND scan technician
- I (or members of my team) will scan. *(Please list all scan technicians or operators below.)*

Full Name	Phone	Email	VA STATUS (WOC) (Y/N)	CIND Certifications		
				Level I (Y/N)	Level II (Y/N)	Level III (Y/N)

**AUTHORIZED SCHEDULER(S)**

Full Name	Phone	Email	VA STATUS (WOC) (Y/N)	Level I (Y/N)

**STUDY TYPE** - *Check all that apply.*

<input type="checkbox"/> SFVAMC 3T SIEMENS SKYRA	<input type="checkbox"/> SFVAMC 7T SIEMENS MAGNETOM
<input type="checkbox"/> <b>Phantom</b>	
<input type="checkbox"/> ADNI phantom	<input type="checkbox"/> BIRN (agar) phantom
<input type="checkbox"/> NIST Diffusion phantom	
<input type="checkbox"/> <b>Human</b> Approved CHR #:	Expires:
<input type="checkbox"/> Normal Volunteers	<input type="checkbox"/> Patients
Study Disease:	
<input type="checkbox"/> <b>Other</b> _____	

*To apply for a recurring slot, please fill out the following:*

**RECRUITMENT**

	# of subjects
	# of scan sessions per subject
	Recruitment duration (years)

**TIME PREFERENCE** - *Please select all that apply.*

*Day of Week:*

- Sunday     Monday     Tuesday     Wednesday     Thursday     Friday     Saturday

*Business Hours:*

- Morning (9:00am–11:00am)     Noon (11:00am–2:00pm)     Afternoon (2:00pm–5:00pm)

*Off-Hours:*

- Early Morning (prior to 9:00am)     Early Evening (after 5:00pm)     Weekends \_\_\_\_\_

**Note: Unfunded studies are not granted recurring slots.**

*Please see CIND Standard Policies on how to schedule unfunded/development scans.*

**SETUP**

Additional equipment setup required in the:

Console Room                       Magnet Room                       Other \_\_\_\_\_

<b>(Box A)</b>	hr	Estimated duration of equipment setup
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**PROTOCOL - DETAILED**

**COIL TYPE** - *Please select all applicable*

3T Skyra Coils:

- |  |   |  |
|--|---|--|
| <input type="checkbox"/> 20 Channel Head/Neck            | <input type="checkbox"/> 32 Channel Head                  | <input type="checkbox"/> Body  |
| <input type="checkbox"/> 4 Channel Small Flex            | <input type="checkbox"/> 4 Channel Large Flex             | <input type="checkbox"/> 36 Channel Peripheral Angio                 |
| <input type="checkbox"/> 16 Channel<br>Shoulder –Large** | <input type="checkbox"/> 16 Channel<br>Shoulder – Small** | <input type="checkbox"/> 16 Channel<br>Hand/Wrist**                  |
|  |   | <input type="checkbox"/> 15 Channel<br>Transmit/Receive Knee (QED)** |

7T Magnetom Coils:

- Nova Medical 1 Channel Transmit / 32 Channel Receive Head

*\*\* These coils are shared with the VA Department of Radiology. If you plan to use any of these coils, you will need to make special arrangements directly with the VA Department of Radiology.*

**MR Research Protocol** - *If available, please attach a copy of the entire protocol.*

If a protocol is not available, please indicate that under “Notes” and explain why.

<b>(Box B)</b>	hr	Length of MR protocol
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NOTES:

LIST **EVERY** ITEM THAT WILL BE TAKEN INTO THE MAGNET ROOM:

TOTAL SETUP TIME = \_\_\_\_\_ (hr:min) **(Box A)**

TOTAL SCAN TIME = \_\_\_\_\_ (hr:min) **(Box B)**

TOTAL TIME per **SESSION** (Box A + Box B + misc. time) = \_\_\_\_\_ (hr)  
(round to the nearest ½ hr)

*Miscellaneous time includes: wipe-down, linen removal, equipment removal, image archival, putting back coils, etc.*

**IMAGE TRANSFER/ARCHIVAL**

How data will be transferred off the system: \_\_\_\_\_

How data will be backed up: \_\_\_\_\_

**ADDITIONAL ANCILLARY EQUIPMENT**

*Please select all ancillary equipment you intend to use*

fMRI

- Avotec Audio/Video Stimulus Capability
- Sound Compressor/Amplifier
- Response Pads, OTEC, and Controller, *Cedrus Lumina*
- Application Software, **E-Prime**

EEG

- Head Cap – MR compatible 32 Channel Cap, **BRAIN PRODUCTS**
- Recording Software, *Brain Vision*

Moiré Phase Tracking System for Prospective Motion Correct, *Metria Innovation Inc.*

- MPT High-Field Camera and Lighting Unit
- MPT Motion Tracking and Measurement Reporting System
- MPT Motion Tracking Markers\*\*

fMRI Compatible Glasses

*\*\*Please note that MPT motion tracking will require an additional materials fee.*

**CLINICAL MRI READS**

*Please select an option regarding the post-acquisition evaluation of a patient.*

STENTOR – For participants with a medical record in the SFVA

- Will all subject scans require reads to be performed?  Yes  No

If no, please provide rationale: \_\_\_\_\_

- Are controls also being recruited?  Yes  No

Other

- Please identify the group that will be performing the clinical reads for your study:

\_\_\_\_\_

- How will images be transferred:

\_\_\_\_\_

None

- Please list the reason(s) for declining read reports:

\_\_\_\_\_

**ABSTRACT / STUDY AIMS**

*Please also include imaging goals by stating the number of subjects, number of scans and number of time points for your study.*

**Have you included everything? Check off materials included with your application:**

ALL STUDIES

- Copy of PO form, if funded study
- Abstract / rationale for the proposed study (page 5)
- Copy of detailed Imaging Research Protocol (or complete page 7)
- Copy of VA TMS MRI Safety and Radiation Safety Trainings completion certificates for all staff who will utilize the scanner (separately attached)

HUMAN STUDIES

- Copy of CHR Approval Notification
- Copy of CHR-Approved VA Informed Consent
- Copy of CHR-Approved HIPAA
- Clinical MRI Reads Form (page 4)

By signing below, I have received a copy of the CIND Standard Policies. I have read, understood, and agree to the CIND Standard Policies.

\_\_\_\_\_  
PI's Name, Printed

\_\_\_\_\_  
PI's Signature

\_\_\_\_\_  
Date

**Additional space, if needed.**

**MR Research Protocol** - *Fill-in as much as possible, see last column for example.*

<b>Series</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>Example</b>
Sequence					<i>MPRAGE</i>
Type & Plane					<i>Sagittal</i>
Voxel Size					<i>1.0x1.0x2.0 mm</i>
Imaging Time (min:sec)					<i>5:30</i>
TR					<i>2300 ms</i>
TE					<i>2.98 ms</i>
TI					<i>1000 ms</i>
Flip					<i>9 deg</i>
Bandwidth					<i>240</i>
FOV					<i>256</i>
Fat Suppression					<i>Water excit. Fast</i>
PAT mode					<i>GRAPPA</i>
Accel. Factor PE					<i>2</i>
Matrix					<i>256x256</i>
Number of Averages					<i>1</i>
Phase Encoding Directions					<i>AP</i>
b-value					<i>n/a</i>
Diffusion Directions					<i>n/a</i>
# of b0s within Diffusion					<i>n/a</i>

<b>Series</b>	<b>5</b>	<b>6</b>	<b>7</b>	<b>8</b>	<b>Example</b>
Sequence					<i>MPRAGE</i>
Type & Plane					<i>Sagittal</i>
Voxel Size					<i>1.0x1.0x2.0 mm</i>
Imaging Time (min:sec)					<i>5:30</i>
TR					<i>2300 ms</i>
TE					<i>2.98 ms</i>
TI					<i>1000 ms</i>
Flip					<i>9 deg</i>
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Number of Averages					<i>1</i>
Phase Encoding Direction					<i>AP</i>
b-value					<i>n/a</i>
Diffusion Directions					<i>n/a</i>
# of b0s within Diffusion					<i>n/a</i>

**Additional Notes:**



LEAVE BLANK. CIND USE ONLY.



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# MR APPLICATION

## Approvals

### ✓ CHECKLIST

- CHR / VA current approval, consent
- CHR /VA approved investigators
- Fund / DPA/ PO valid for billing
- Imaging protocol reviewed, scan time appropriate
- Radiologist for human subject studies or Waiver
- Image archival requirements reviewed
- TMS Certificates

### RECURRING SLOT APPROVED FOR:

*Day of Week:*

- Sunday     Monday     Tuesday     Wednesday     Thursday     Friday     Saturday

*Time of Day:*

\_\_\_\_\_

*Expires on:*

\_\_\_\_\_

Diana Truran Sacrey, Recharge Analyst and Chief Operations Manager - Checklist and funding reviewed and approved

Signature

Date

Katherine Wu, Imaging Core Supervisor  
Corrina Fonseca, Magnet Lead - Imaging protocol and procedures reviewed and approved.

Signature

Date

Jacqueline Hayes Project Manager – CHR and Consent forms reviewed and approved

Signature

Date

Duygu Tosun-Turgut, PhD, CIND Co-Director and Assistant Professor, application approved

Signature

Date

**LEAVE BLANK. CIND USE ONLY.**

**Approval Notes:**