

# CAMRIS Update

December 7, 2022



**Perelman**  
SCHOOL OF MEDICINE  
UNIVERSITY of PENNSYLVANIA

Center for Advanced  
Magnetic Resonance  
Imaging and Spectroscopy

# Agenda

(Re-)Introduction of key CAMRIS personnel

How we communicate

Billing, scheduling, and future rates

Protocol submission and review

Update on "Techdev" volunteers

Update on Flywheel

Q&A

*Co-Directors:* John Detre, Ronald Wolf, Dylan Tisdall

*Associate Director:* Margaret Ryan

*Research Technologists:* Allison Costa, Jacqui Meeks,  
Pat O'Donnell, Victoria Siu,  
Allison Urbaniak

*Physicists:* Karthik Prabhakaran, Mark Elliott

*Director, Research Operations:* Kathleen Thomas

*Director, Core Facilities:* Norman Butler

*Director, Fiscal Operations:* William D'Arcy

*Business Manager:* Michael McCandless

# Agenda

(Re-)Introduction of key CAMRIS personnel

How we communicate

Billing, scheduling, and future rates

Protocol submission and review

Update on "Techdev" volunteers

Update on Flywheel

Q&A

Quarterly Technical  
Users Meetings



Semi-Annual  
Town Hall



Margaret Ryan { **Inbound:**  
scanner scheduling  
billing issues  
failure reports  
training requests  
implant clearance

techs & physicists { **Inbound:**  
scanner scheduling  
billing issues  
**failure reports**  
training requests  
implant clearance

Level 1: link on CAMRIS website {

**Inbound:**

scanner scheduling

billing issues

failure reports

**training requests**

implant clearance



Level 2: working on it {

**Inbound:**

scanner scheduling

billing issues

failure reports

**training requests**

implant clearance

HUP CRC Orientation: techs {

**Inbound:**

scanner scheduling

billing issues

failure reports

**training requests**

implant clearance

Norman, John, and Ronald { **Inbound:**  
scanner scheduling  
billing issues  
failure reports  
training requests  
**implant clearance**

### Inbound:

scanner scheduling  
billing issues  
failure reports  
training requests  
implant clearance

### Outbound:

equipment status  
scheduled maintenance  
tech availability  
available services

<http://camris.statuspage.io>

### **Inbound:**

scanner scheduling  
billing issues  
failure reports  
training requests  
implant clearance

### **Outbound:**

equipment status  
scheduled maintenance  
tech availability  
available services



CAMRIS Help Center / CAMRIS Devices, Implants, and Safety

## CAMRIS Devices, Implants, and Safety

Welcome! You can raise a request for CAMRIS using the options provided.

What can we help you with?



### Implant Approval

Request approval for an implant or device

Please attempt to fill in as many fields on this form as possible. The more information you can provide, the more quickly we can provide a response.

Email confirmation to \*

Summary \*

Provide a brief description of the implant (e.g., "Surgical screws")

IRB Protocol Number

Study Subject ID



Starting Spring 2023

# Agenda

(Re-)Introduction of key CAMRIS personnel

How we communicate

Billing, scheduling, and future rates

Protocol submission and review

Update on "Techdev" volunteers

Update on Flywheel

Q&A



# FY 2023

Jul 2022 - Jun 2023

---

Government-sponsored	\$750/hr
----------------------	----------

---

Industry Sub/Gift/CHOP	\$950/hr
------------------------	----------

---

Outside Non-Sub	\$1219/hr
-----------------	-----------

---

Cancel < 48h	\$100
--------------	-------

+3% per  
year

A photograph of a white metal folding chair placed on a sidewalk. The sidewalk is partially covered with snow, and there are large piles of snow on either side. In the background, a blue car is parked on a street. The scene is set in a residential area with buildings and other parked cars visible in the distance.

Please don't book  
space-savers

Current calendar software will be in place until at least 2024

Next solution will likely be iLab

Opportunity to reevaluate how we schedule

Will start collecting granular data on scanner usage (Spring 2023)

# Agenda

(Re-)Introduction of key CAMRIS personnel

How we communicate

Billing, scheduling, and future rates

Protocol submission and review

Update on "Techdev" volunteers

Update on Flywheel

Q&A

Protocol  
Submissions

at least

2 weeks

Technical  
Review

at least

1 week

Full  
Reviews

at least

3 days

CAMRIS  
Meeting

Month

1<sup>st</sup> Mon



# Agenda

(Re-)Introduction of key CAMRIS personnel

How we communicate

Billing, scheduling, and future rates

Protocol submission and review

Update on "Techdev" volunteers

Update on Flywheel

Q&A

# Monolithic "Techdev" Protocol

Pulse Sequence  
Development

Hardware  
Development

Protocol  
Research

Protocol  
Testing

Study  
Qualification

## Per-Lab Protocols

Pulse Sequence  
Development

Hardware  
Development

Protocol  
Research

## Central Protocol

Protocol  
Testing

Study  
Qualification

Late 2023



# Agenda

(Re-)Introduction of key CAMRIS personnel

How we communicate

Billing, scheduling, and future rates

Protocol submission and review

Update on "Techdev" volunteers

Update on Flywheel

Q&A

# Flywheel

## Collection



Reap or DICOM transfer  
Auto De-ID (+ Deface)

## Storage



<90 days: Free  
>90 days:  
Project + GCP fees  
Long-term archive  
Becoming CAMRIS  
default

## Retrieval



Web interface/viewer  
Python API  
Open sharing platform

## Processing



"Gears" (containers)  
GCP Compute fees  
Well-defined per-run  
costs

# Agenda

(Re-)Introduction of key CAMRIS personnel

How we communicate

Billing, scheduling, and future rates

Protocol submission and review

Update on "Techdev" volunteers

Update on Flywheel

Q&A