ACR Center for Research and Innovation (CRI)

Staff and Systems Overview
ACR CRI
Program Overview

STATE-OF-THE-ART FACILITIES
Physical facility and virtual program

OVER 50 YEARS’ EXPERIENCE
Over 500 projects conducted, more than 350 research sites worldwide, greater than 170,000 study participants, 2 million+ images processed annually

STAFF AND INFRASTRUCTURE
Distributed staff and technology

ANALYSIS CAPABILITIES
Both remote and central (on-site) interpretation analysis

ANNUAL BUDGET
$30-$40 Million annual budget – both federal grants + industry projects
Core Competencies

Research Programs

**Radiation Oncology Clinical Trials**
Protocol Development, Regulatory, Site Services, Project Management, Data Management, RTQA Corelab, Statistics

**Diagnostic Imaging Clinical Trials**
Study Design, Regulatory, Site Services, Project Management, Monitoring, Data Management, Imaging Corelab, Statistics

**Research Informatics**
Study Design, Regulatory, Site Services, Project Management, Data Management, Imaging Corelab, Statistics, Validation, Reviewer Workflow
Clinical Research Staff

160 Research Staff spread across different areas of expertise

Finance and Accounting
- Grants and Contracts Specialists

Information Technology
- Data Scientists, Imaging Informatics Specialists, Software Engineers, Application Developers, Quality Assurance Specialists

Imaging Core Lab
- Imaging Technologists, Dosimetrists

Clinical Research Administration: Diagnostic Imaging, Informatics, Radiation Oncology

Clinical Data Management
- Data Programmers, Data Managers, Data Analysts

Biostatistics
- Biostatisticians

Legal
- Attorneys, Contracts Officers
ACR Research Operations Infrastructure
ACR CRI Services

Services of a full clinical contract research organization (CRO)

**Funding**
- Grants and Commercial Sponsors

**Project Development**
- Study Design and Contracting

**Study Document Creation**

**Site Services**
- Site Selection & Qualification, Subject Recruitment Mgmt., Site/Reader/CRO Training, IT Informatics Solutions

**Study Execution & Operational Management**
- Image Collection + QC, Data Collection + QC, QA + Regulatory, Reviewer Contracting & Mgmt.

**Analysis**
- Image Central Review, Validation, Analytic Tools + Pipelines, Statistical Analysis, Data Transfer

For more information:
https://www.acr.org/Research/Clinical-Research
Research Project Types

Clinical trial services to support all project types

- Screening/Detection
- Therapeutic/Response Trials
- Radiation Therapy
- Novel Imaging Methods
- Biomarker Development/Validation
- Central Reader Studies
- Reader Education / Truther / Testing
- Software/Hardware Validation
- Registries
- AI Algorithm Development / Validation
- Socio-Economic Research

For more information: research@acr.org
ACR Research Clinical Systems
ACR TRIAD & ACR DART

**TRIAD - Transfer of Images and Data**
- Developed to support image-sharing and workflow needs
- Standards-friendly (DICOM, IHE) and FDA Compliant (CFR 21 Part 11)
- Over 10 Years Serving Diagnostic and Radiation Therapy Clinical Trials
- Unique anonymization profiles configured by Administrator
  - Flexibility to assign at the trial, site, submission parameters or DICOM tag level
  - Applied automatically locally prior to ingestion and/or outbound
- ACRConnect, as the next generation, provides a vendor-neutral infrastructure, making it easier for collaborations and expansion
  - [https://acr-1.wistia.com/medias/yark5c83be](https://acr-1.wistia.com/medias/yark5c83be)

**DART - Data Archive and Research Toolkit**
- Cloud-based, integrated platform
- Federated access to data across domains for analytics, tool development, and closed-loop storage
- Easier for researchers to analyze images and other clinical data – can run within platform or download locally
- Data commons that houses not just imaging data, but all clinical + imaging data
  - [https://acr-1.wistia.com/medias/7ydgf1evr6](https://acr-1.wistia.com/medias/7ydgf1evr6)
Other Vendor Systems

• Medidata RAVE
  • Industry’s leading solution for capturing, managing, and reporting patient data
  • Scalable, configurable, flexible

• Core Lab Imaging Applications
  • Various qualified and FDA cleared applications for different modalities and review types
    • Volumetric Measurements/Segmentation
    • DICOM Viewer/QC
    • RECIST Evaluation
    • Angiography/CTA
    • SUV Measurements
    • Fusion
    • Dynamic Contrast MRI
    • MR Spectroscopy