

Co-Clinical Imaging Research Resources Program (CIRP)

CIRP Annual Meeting

May 20-21, 2024

<https://wiki.nci.nih.gov/display/NCICRIP>

**Animal
Models**



**Co-Clinical
Trials**



**Quantitative
Imaging**



Informatics

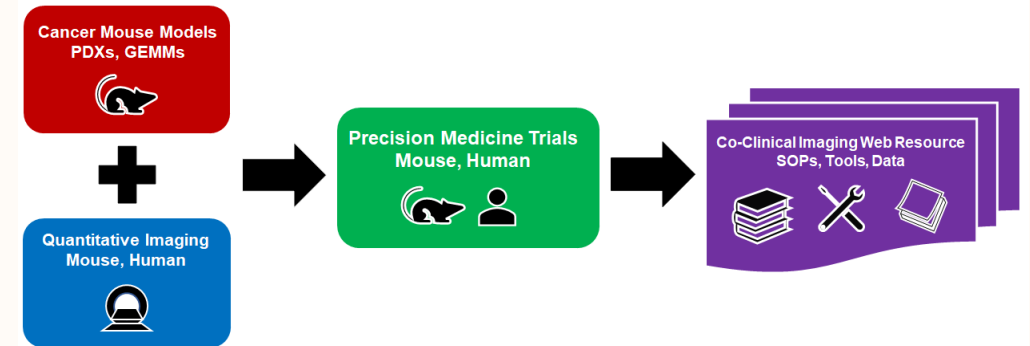


About the NCI CIRP

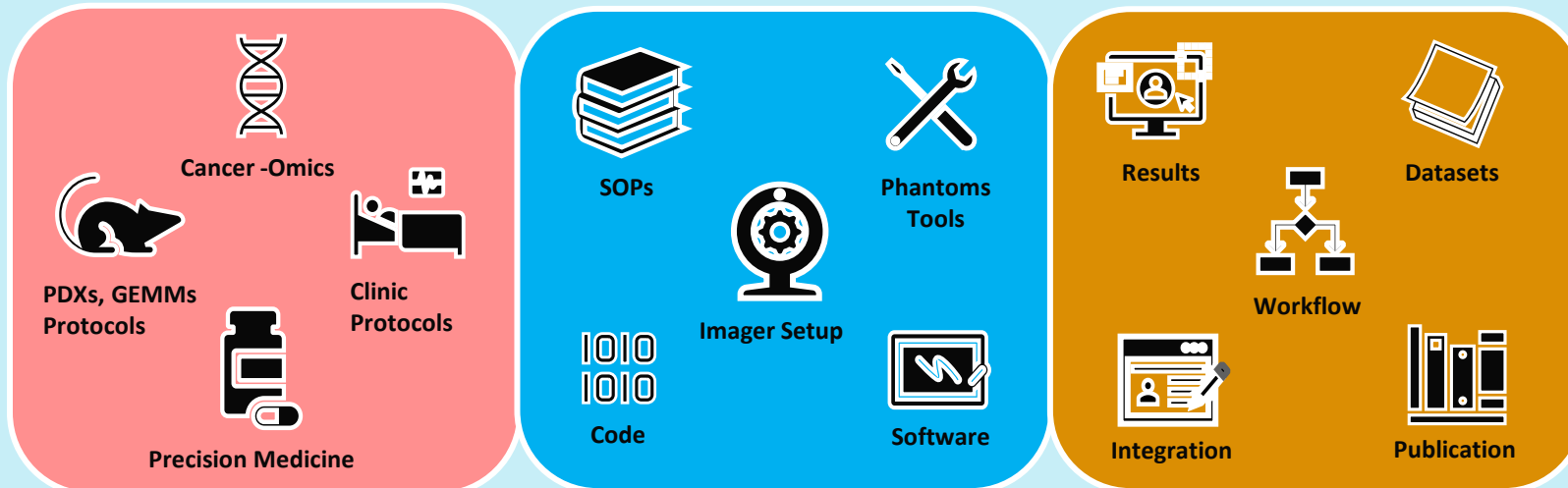
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CIRP Essential Elements:

- ❑ Credential GEMMs/PDXs, adult/pediatric cancers
- ❑ Co-Clinical quantitative imaging methods
- ❑ Co-Clinical therapeutic trials
- ❑ Web resource with methods, tools & results



CIRP Web Resources: Workflow & Information



CIRP Web Resources Completion Timeline

Cancers	Diseases	Animals	Therapy	Imaging	Web Resource	When
Hematology	Myelofibrosis	GEMMs	Target Therapy	MRI	U MICH: https://umu24cirp.med.umich.edu/	2024
Bone	Osteosarcoma	PDXs	Immunotherapy	MRI	Stanford: https://radweb.su.domains/cirp/	2026
Breast	TNBC	PDXs	Chemotherapy	PET/MRI	WUSTL: https://c2ir2.wustl.edu/	2022
	TNBC	PDXs	Chemotherapy	MRI	BCM/UTA/Stanford: https://miraccl.research.bcm.edu/	2024
	ER+/HER2-	PDXs	Hormone Therapy	PET	WUSTL: https://c2ir2.wustl.edu/	2027
Colon	CRC	PDXs	Target/Immunotherapy	PET	MDACC: https://www.mdanderson.org/research/departments-labs-institutes/programs-centers/predict.html	2023
Lung	NSCLC	GEMMs	Target Therapy	PET	UW: https://sites.uw.edu/cocirp/	2026
Muscle	Sarcomas	GEMMs	RT/Immunotherapy	CT, MRI	Duke: https://sites.duke.edu/pcqiba/	2022
Pancreas	PDA	GEMMs	Target Therapy	MRI	UPENN: https://pennpancreaticcancerimagingresource.github.io/	2023
Prostate	SCNC	PDXs	Chemotherapy	MRI	UCSF: https://coclinicalimaging.ucsf.edu/	2025

Special issue: **CIRP Network Collection: Advances in Co-clinical Quantitative Imaging Research**
https://www.mdpi.com/journal/tomography/special_issues/AQCCIR , Tomography, 2023

WMIC 2024
World Molecular Imaging Congress

MONTRÉAL QUÉBEC, CANADA

SEPTEMBER
9-13, 2024

ABSTRACT DEADLINE: APRIL 12, 2024



CIRP Session @ 2024 WMIC

Sept 12, 2024, 1:15 PM -2:45 PM

Session: *Quantitative Co-Clinical Imaging Trial to Assess Drug Response*

- 1) Overview of all CIRP projects at high level
- 2) Selected examples of completed or nearly completed CIRP projects/resources: PET, CT, MRI
- 3) Overview of proposed roadmap to the future

This Annual Hybrid Meeting: Program

Day 1

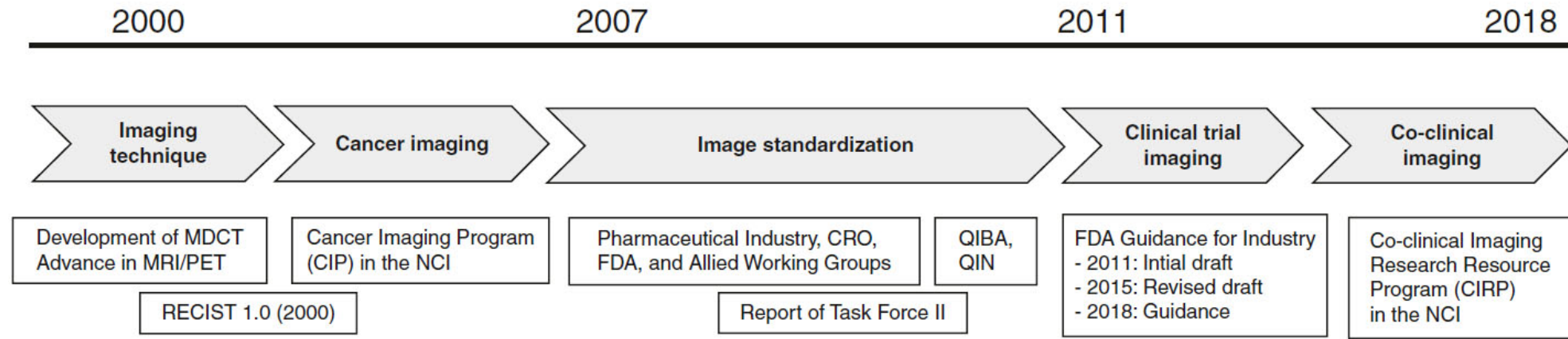
- ❑ CIRP Team Reports
- ❑ Poster Power Pitch
- ❑ Posters and Demonstrations

Day 2

- ❑ Workshop on Co-Clinical Imaging Roadmap
- ❑ CIRP Working Groups
- ❑ CIRP Business Meeting

Move Beyond the CIRP: Workshop on Day 2

History of Clinical Imaging:



Lee, A.J. et al., 2020

Co-Clinical Imaging Resource Program (CIRP): Bridging the Translational Divide to Advance Precision Medicine

Shoghi, KI, et al., 2020

Co-Clinical Imaging for Oncology Precision Medicine: Workshop on Day 2

- ❖ How to Move beyond the CIRP ?

- ❖ What is the Roadmap?

Workshop on Co-Clinical Imaging Roadmap

9:30 - 10:00: Introduction, Brian Ross/John Kurhanewicz

As we approach the 10-year milestone of the CIRP, the goal of this workshop is to formulate a clear vision which outlines the role of co-clinical imaging will play in advancing precision oncology and provide a roadmap for the successful implementation of co-clinical imaging in a White Paper. Examples derived from the CIRP network provide the rationale and key elements of a successful co-clinical imaging trial that will be discussed.

10:00 - 10:30: Co-Clinical animal models to enable co-clinical imaging trials, Donna Peehl

10:30 - 11:00: Image acquisition and data processing considerations to harmonize co-clinical imaging trials, Cristian Badea

11:00 - 11:30: informatics needs to support integration of co-clinical imaging datasets, data mining, and advanced computing, Kooresh Shoghi

11:30 - 12:00: Summary and Further Discussion, Brian Ross/John Kurhanewicz

Questions?