



UCSF Partnership with CAMS PUMC

NCI caBIG Workshop

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UCSF HDFCCC CAMS-PUMC Partnership

Goal:

***Establish joint programs
in Cancer Research,
and Training***

UCSF HDFCCC CAMS-PUMC Partnership

- **Implementation MOU**
 - Establish joint research teams for the study, treatment, and management of cancer
- **Disease Based Research teams – Stage I**
 - Lung Cancer
 - Breast Cancer
 - Brain Tumors
 - Hepatocellular Carcinoma
 - Genito-Urinary Cancers

Each team to be led by co-investigators from each institution: one from PUMC-CAMS, and one from UCSF

Research Objectives in Partnership

- To obtain better understanding of the causes of these 5 types of cancer in China as well as the key genes and proteins involved in their progression.
- To identify new targets and pathways that drive these tumors
- To conduct early stage clinical trials with novel and promising investigational therapeutic agents
- To conduct epidemiologic research with the objectives of identifying patients with clinically significant cancer at earlier stages of disease

Training Program

- UCSF and PUMC/CAMS will initiate a clinical research training program for PUMC faculty and cancer trainees that will enhance their ability to lead cutting edge clinical research trials.
- Enrollment in specific courses like Clinical Trial Design, Biostatistics, Epidemiology, etc. at UCSF in the CTSI will be open to faculty and students with appropriate backgrounds that are selected by PUMC/CAMS for this program.

Established Training Program

- Faculty selected by PUMC/CAMS will join UCSF Helen Diller Family Comprehensive Cancer Center research teams in the 5 broad types of cancer indicated in Stage I for participation in their academic activities including Tumor Boards, Clinical and Research conferences, Protocol Review meetings, Clinical Trial meetings, and general Cancer Center research seminars.
- At the conclusion of these sabbaticals, the PUMC/CAMS faculty will return to their parent institution and serve as co-leaders of joint clinical trials with UCSF.

Partnership: To Link Clinical Trials to Correlative Scientific Research

- Discovery of Biomarkers that will be useful for treatment of cancer patients
- Investigation of the critical biochemical pathways that mediate the beneficial effects of TCM's

Underlining Elements:

Biospecimen, Clinical and Biomedical Informatics

- UCSF will partner with PUMC/CAMS to establish annotated, state of the art research tissue banks as well as a robust clinical trials data base that will enable and enhance joint clinical research trials with the UCSF-Helen Diller Family CCC

Translational Informatics at UCSF

Mission:

Deliver Suite of Informatics Services to support translational, biomedical, and clinical research, as well as clinical care improvement.

Focus:

- Capture, Storage, Dissemination of Clinical, Biomedical, and Research Data that can easily be merged, integrated, or aggregated with other data sets.
- Development of unified technology platforms leveraging cutting-edge advances in Informatics and computing.

Mapping Goals to Informatics Platforms

Cancer Center Goals

Corresponding TI & caBIG Platforms

Expanding Clinical and Translational Research Capability

- ✓ Clinical research
- ✓ Research infrastructure
- ✓ Phenotyping

- **caArray** (Array Data Management)
- **caTissue** (Biospecimen Management)
- **URM** (Unified Registry Module – SPORE DB)
- **REDCap / REDCap Survey** (Light DB / Survey System)
- **CTMS** : OnCore / BSM / Caisis
- **CALAEGS**: Automated Adverse Event Grading
- **Medidata RAVE (Cooperative Group Trials)**
- **caIMAGE** (Image Data)

Enhancing Collaborations

- ✓ Social networking
- ✓ Resource sharing
- ✓ Data sharing

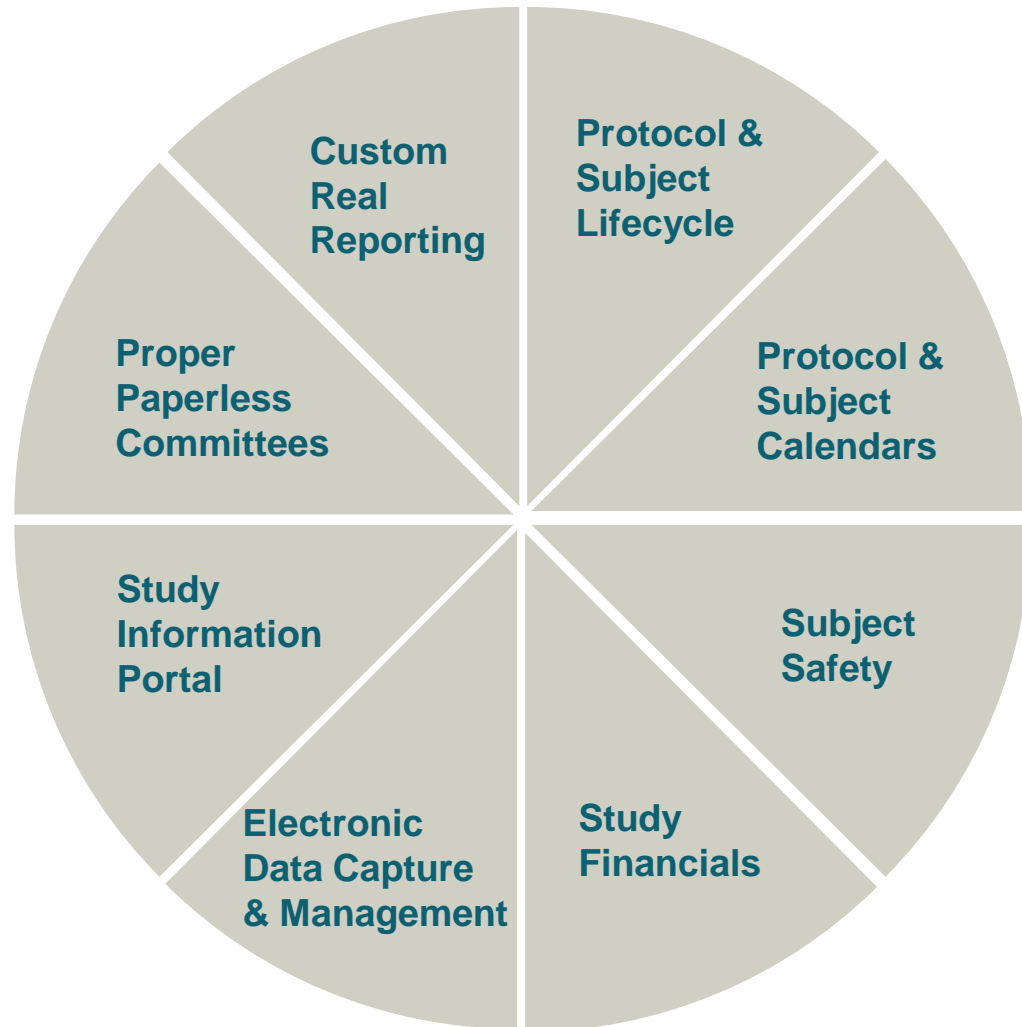
- **caGRID** (Electronic Data Interchange)
- **Mirth & caXchange** (Lab Data Service Bus)
- **Lab Viewer** (Clinical System “Wrapper”)
- **Cancer Electronic Data Warehouse**
- **LatticeGrid**
- **caLIMS**

Encouraging T1 Translational Research

- ✓ Knowledge translation
- ✓ Hypothesis generation

- **UCSD Genome Browser**
- **caGWAS** (GWAS query processing, SNP Data)
- **GenePattern** (Genomic Data Analysis)
- **geWorkbench** (Biomarker Data Analysis)
- **caIntegrator2** (Translational Data Analysis)
- **Ingenuity IPA** Pathway Analysis
- **Oncomine**

Example Lifecycle Clinical Research Management

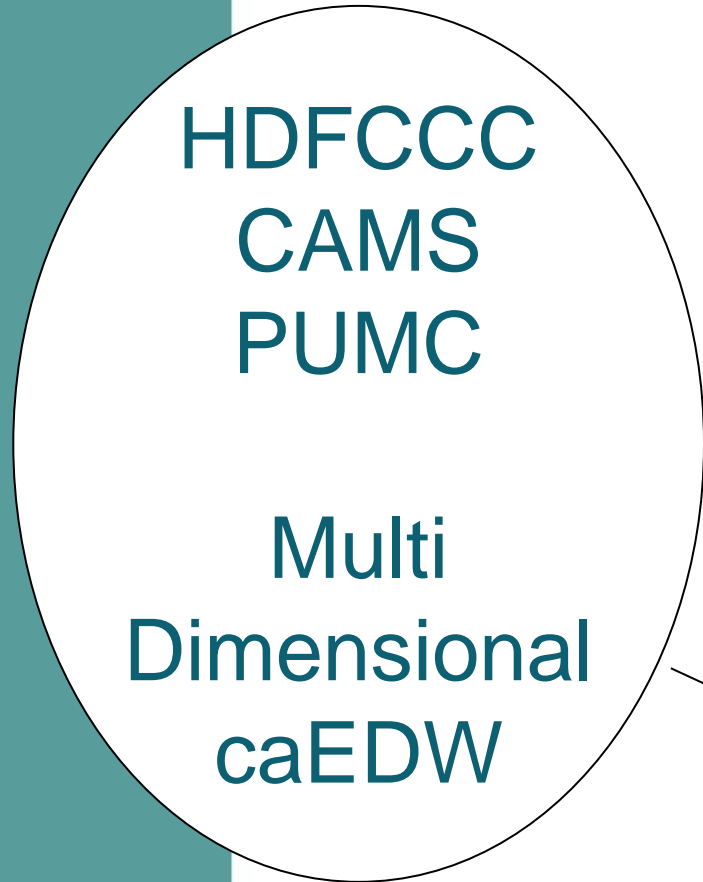




Cancer EDW Principles :

PUMC CAMS ↔ UCSF

- Built to accept heterogeneous data sources from multiple sources based on metadata architecture
- A single global repository provides data resources for patients, research, and healthcare
- Use of data marts allows for the creation of customized data sets to meet user needs
- Data can be exported to other systems as required
- Designed using standard technologies that provide flexibility and scalability



Researcher
View



Clinician
View



Patient
View

UCSF Collaboration Acknowledgements

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Chief, Division of Hematology and Oncology


Director of Investigational Therapeutics and Deputy Director,
UCSF Helen Diller Family Comprehensive Cancer Center

Susan Desmond-Hellmann, M.D., M.P.H.

UCSF Chancellor

UCSF Translational Informatics : Current Locations



A high-angle, wide shot of the Golden Gate Bridge in San Francisco, California. The bridge's iconic orange-red towers and suspension cables are prominent against a clear blue sky. The bridge spans across the water, with the city skyline visible in the distance. The overall scene is bright and clear.

非常感谢！
有問題嗎？

UCSF

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