ITCR 2016 Annual PI Meeting Presentations ITCR 2016 Annual Meeting

Notes are available here

Posters are available here

Participant List is available here (ITCR Group Members Only)

Day One

Welcome: Juli Klemm and Aviv Regev

Keynote Corrie Painter: Empowering Patients to Drive Biomedical Research

Genomics Session I Chair: Joshua Stuart

Martin Morgan Cancer Genomics: Integrative and Scalable Solutions in R / Bioconductor

<u>Jingchun Zhu</u> Cloud Based Resource for Data Hosting, Visualization and Analysis Using UCSC Xena

<u>Jill Mesirov</u> Gene Pattern Notebooks for Cancer Research

<u>Trey Ideker</u> NDEx – the Network Data Exchange, a Network Commons for Biologists

Imaging Session I Chair: Rebecca Jacobson

<u>Lee Cooper, David Gutman</u> Advanced Development of an Open Source Platform for Web-Based Integrative Digital Image Analysis in Cancer

<u>Jayashree Kalpathy-Cramer</u> Informatics Tools for Optimized Imaging Biomarkers for Cancer Research & Discovery

Andriy Fedorov Quantitative Image Informatics for Cancer Research (QIICR)

<u>Christos Davatzikos</u> Cancer Imaging Phenomics Software Suite: Application to Brain and Breast Cancer

ITCR Training and Outreach Working Group Lunch Meeting

Lightning Talks for New Groups

Xiao Xinshu Informatic Tools for Single-Nucleotide Analysis of Cancer RNA-Seq

<u>Chakra Chennubhotla Srinivas</u> Informatics Tools for Tumor Heterogeneity in Multiplexed Fluorescence Images

<u>Terry Meehan</u> The PDX Integrator- Re-purposing KOMP2 informatics to Widely Disseminate Data from Patient Derived Xenografts

<u>Daniel Marcus</u> Integrative Imaging Informatics for Cancer Research

Hua Xu Advancing Cancer Pharmacoepidemiology Research Through EHRs and Informatics

<u>Timothy Griffin</u> A Galaxy?Based Multi?Omic Informatics Hub for Cancer Researchers

Genomics Session II Chair: Jill Mesirov

Brian Haas Trinity: Transcriptome Assembly for Genetic and Functional Analysis of Cancer

<u>Alexander Krasnitz</u> Computational Framework for Single – Cell Genomics of Tumors

<u>Xiaole Shirley Liu</u> Developing Informatics Technologies to Model Cancer Gene Regulation

Technical Working Group Demonstration Projects Led by Jayashree Kalpathy-Cramer and Tahsin Kurc

Clinical Session Chair: Aviv Regev

Guoqian Jiang caCDE-QA: A Quality Assurance Platform for Cancer Study Common Data Elements

Rebecca Jacobson: Advanced Development of TIES – Enhancing Access to Tissue for Cancer Research

<u>Elmer Bernstam and Funda Meric-Bernstam</u> Informatics to enable routine personalized cancer therapy

Keynote Eli Van Allen: Clinical interpretation of the cancer genome for precision oncology

Poster Session

Day Two

Opportunities for IMAT - ITCR Collaboration Tony Dickherber David Hill

Genomics Session III Chair: Trey Ideker

Rachel Karchin Informatics Tools for High-¬throughput Analysis of Cancer Mutations

<u>Bobbie-Jo Webb-Robertson</u> Interactive Informatics Resource for Research-Driven Cancer Proteomics

Yaoyu Wang Me V: Software for Next Generation Genomic Data Analysis

<u>Jingshan Huang</u> Omni Search – A Semantic Search Tool for Discovering microRNAs Critical Roles in Human Cancer

Imaging Session II Chair: Xiaole Shirley Liu

Gordon Harris Extensible Open-?Source Zero-¬?Footprint Web Viewer for Oncologic Imaging Research

Joel Saltz Tools to Analyze Morphology and Spatially Mapped Molecular Data

Kun Huang Informatics Links Between Histological Features and Genetics in Cancer

<u>Anant Madabhushi</u> Pathology Image Informatics Platform for Visualization, Analysis and Management

ITCR Technical Working Group Lunch Meeting

Genomics Session IV Chair: Brian Haas

Benjamin Berman Software Tools for Regulatory Analysis of Large Cancer Methylome Datasets

<u>Maureen Sartor</u> Integrative Epigenomic / Genomic Profiling and Biomarker Discovery in HPV+ and HPV-

<u>John Weinstein and Bradley Broom</u> Next? Generation Clustered Heat Maps for Fluent, Interactive Exploration of Omic Data

Big Data and EMR Session Chair: Rachel Karchin

Joshua Stuart and Kyle Ellrot: ESCE: Discovering Molecular Processes

Hong Yu EMR Adverse Drug Event Detection for Pharmacovigilance

Guergana Savova: Cancer Deep Phenotype Extraction from Electronic Medical Records

Imaging Session III Chair: Robert Majovski

Hugo Aerts Quantitative Radiomics System Decoding the Tumor Phenotype

Lauren O'Donnell Open Source Diffusion MRI Technology for Brain Cancer Research

Discussion of Collaboration and Integration Opportunities: Led by Joel Saltz and Jill Mesirov

Closing Remarks: Juli Klemm and Aviv Regev