

ITCR 2017 Annual PI Meeting Materials

[Posters](#)

[Notes](#)

Agenda and Presentations

Day One

Welcome: Josh Stuart

Resources Session I Chair Obi Griffith

[Obi Griffith](#): Development of Informatics Resources for Interpretation of Clinically Actionable Variants in Cancer

[Terry Meehan](#): The PDX Integrator – Re-Purposing KOMP2 Informatics to Widely Disseminate Data from Patient Derived Xenografts and Electronic Access to Mouse Tumor Data

[John Weinstein and Bradley Broom](#): Next-Generation Clustered Heat Maps for Fluent, Interactive Exploration of Omic Data [Video](#)

[Levi Waldron](#): Cancer Genomics: Integrative and Scalable Solutions in R / Bioconductor [Video](#)

[Rachel Karchin](#): Informatics Tools for High-Throughput Analysis of Cancer Mutations

[Michael J Becich](#): Advanced Development of TIES-Enhancing Access to Tissue for Cancer Research

Imaging Session I Chair Joel Saltz

[Xiaodong Wu](#) Developing Enabling PET-CT Image Analysis Tools for Predicting Response in Radiation Cancer Therapy

[Lauren Jean O'Donnell](#) Open Source Diffusion MRI Technology for Brain Cancer Research

[Christos Davatzikos](#) Cancer Imaging Phenomics Software Suite: Application to Brain and Breast Cancer [Video](#)

[John Quackenbush](#) Quantitative Radiomics System Decoding the Tumor Phenotype

Lunch / TOW Working Group Get Together

New Groups Lightning Talks

[Vincent Carey](#): Accelerating Cancer Genomics with Cloud Scale Bioconductor

[Nathalie Pochet](#): Integrative genomic framework for dissecting regulatory mechanisms underlying hepatocellular carcinoma

[Raja Mazumder](#): Integration of comprehensive cancer mutation and expression-associated data for biomarker evaluation and discovery

Clinical Session I Chair Guergana Savova

[Hua Xu and Ping Yang](#): Advancing Cancer Pharmacoepidemiology Research Through EHRs and Informatics [Video](#)

[Guoqian Jiang](#): caCDE-QA: A Quality Assurance Platform for Cancer Study Common Data Elements

[Hong Yu](#): EMR Adverse Drug Event Detection for Pharmacovigilance

[Guergana Savova](#): Cancer Deep Phenotyping Extraction from Electronic Medical Records [Video](#)

Advanced Omics Session I Chair Brian Haas

[Gabor Marth](#), Aaron Quinlan: Monitoring Tumor Heterogeneity Over Time and Space

[Dinler Antunes](#): Structure-Based Selection of Tumor-Antigens for T-Cell Based Immunotherapy

[Xinshu Grace Xiao](#): Informatics Tools for Single-Nucleotide Analysis of Cancer RNA-Seq

[Aviv Regev and Brian Haas](#): Trinity: Transcriptome Assembly for Genetic and Functional Analysis of Cancer

Ben Raphael (Keynote): Algorithms for Inferring Evolution and Migration of Tumors

Day Two

Imaging Session II Chair Andrey Fedorov

[Andrey Fedorov](#): Quantitative Image Informatics for Cancer Research (QIICR)

[Daniel Marcus and Richard Wahl](#): Integrative Imaging Informatics for Cancer Research

[Avant Madabhushi and Anne Martel](#): Pathology Image Informatics Platform for Visualization, Analysis and Management

[Kun Huang](#): Informatics Links between Histological Features and Genetics in Cancer [Video](#)

[Jayashree Kalpathy-Cramer](#): Informatics Tools for Optimized Imaging Biomarkers for Cancer Research & Discovery

[Joel Saltz](#): Tools to Analyze Morphology and Spatially Mapped Molecular Data [Video](#)

Resources Session II Chair Jing Zhu

[Jill Mesirov](#): The Integrative Genomics Viewer (IGV): Visualization Supporting Cancer Research [Video](#)

[Timothy Griffin](#): A Galaxy-Based Multi-Omic Informatics Hub for Cancer Researchers [Video](#)

[Josh Stuart and Kyle Ellrott](#): BMEG: Biomedical Evidence Graph [Video](#)

[Trey Ideker and Dexter Pratt](#): NDEx – the Network Data Exchange, A Network Commons for Biologists

[Jiang Zhu](#): UCSC Xena – Cloud Based Resource for Data Hosting, Visualization and Analysis

Advanced Omics Session II Chair Alexander Krasnitz

[Han Liang](#): The Cancer Proteome Atlas, TCPA: An Integrated Bioinformatics Resource for Functional Cancer Proteomic Data

[Dongjun Chung](#): Algorithms for Literature-Guided Multi-Platform Identification of Cancer Subtypes

[Alexander Krasnitz](#): Computational Framework for Single-Cell Genomics of Tumors

[Jingshan Huang](#): Omni Search: A Semantic Search Tool for Discovering Micro RNAs' Critical Roles in Human Cancer

Imaging Session III Chair Hiroyuki Yoshida

[Srinivas Chakra Chennubhotla and Daryl Sarachan](#): Informatics Tools for Tumor Heterogeneity in Multiplexed Fluorescence Images [Video](#)

[Trinity Urban](#): Next Steps for Lesion Tracker: Integration with a Clinical Trials Workflow Informatics System

David Andrew Gutman: Advanced Development of an Open-source Platform for Web-based Integrative Digital Image Analysis in Cancer [Video](#)

Group Discussion