

# PanCanAtlas Oncogenic Processes

Li Ding, Gaddy Getz, David Wheeler

# Group Members

Investigator FN	Investigator LN	Institution	Project 1	Project 2	Project 3
Matthew	Bailey	WashU	Drivers		
Rameen	Beroukhim	Broad	Telomeres		
Andrew	Cherniack	Broad	Anneuploidy		
Kyle	Covington	BCM	Mutation Signatures		
Li	Ding	WashU	Drivers	Germline	
Gavin	Ha	Broad/DFCI	Anneuploidy		
Peter	Hammerman	DFCI	Immune		
Kuan-lin	Huang	WashU	Germline		
Jason	Huse	MSKCC	Telomeres		
Marcin	Imielinski	Weill-Cornell,NYGC	Driver Negative		
Reyka	Jayasinghe	WashU	Drivers		
Kim	Johnson	WashU	Germline		
Cyriac	Kandoth	MSKCC	Drivers		
Yuexin	Liu	WashU	Germline		
Nuria	Lopez-Bigas	UPF Barcelona	Drivers		
Mike	McLellan	WashU	Drivers	Germline	
Matthew	Meyerson	Broad/DFCI	Driver Negative	Telomeres	Anneuploidy
Beifang	Niu	WashU	Drivers		
Ben	Raphael	Brown	Networks		
Deborah	Ritter	BCM	Germline		
Juliann	Shih	WashU	Anneuploidy		
Ilya	Shmulevich	ISB	Immune	Germline	
Josh	Stuart	UCSC	Essential Genes		
Alison	Taylor	Broad	Anneuploidy		
Vésteinn	Thorsson	ISB	Immune		
Jiayin	Wang	WashU	Germline		
Linghua	Wang	BCM	Immune		
Mike	Wendl	WashU	Drivers		
David	Wheeler	BCM	Essential Genes	Germline	Mutation Signatures
Venkata	Yellapantula	WashU	Drivers		
Qunyuan	Zhang	WashU	Drivers		
Wei	Zhang	WashU	Germline		

# Eight Subtopics

Aneuploidy/Structural variants

Driver/Driver-negative

Environmental Signatures

Essential Genes

Germline

Heterogeneity and tumor evolution\*

Immune

Telomeres

# Five Goals/Subgroups

1. Genetic drivers (essential genes, germline and somatic)
2. Tumor genome architecture (telomere, structural variants, aneuploidy etc.)
3. Mutational signatures
4. Tumor evolution
5. Immune response

# Status Report

1. Developed a proposal for generating a high quality mutation catalog for PanCanAtlas
2. We are working with UCSC and other groups on moving systematic, standardized mutation calling forward
3. We plan to have a conference call with participants of the eight subtopics in the next couple of weeks to coordinate efforts (coordinated through Julia)
4. Immune topic subgroup had its first conference call on June 1st