

SWOG Plenary I

Translational Medicine

Science as the Foundation for Rapid and Meaningful Advances in Oncology

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Thanks to James Rae, PhD (AKA J.R.)

SWOG Executive Officer, Translational Medicine

Presenter Disclosure Information

Lee Ellis, MD: Consultant for Genentech/Roche

Marge Foti, PhD, MD (hc): No Disclosures

Lillian Siu, MD: No Disclosures

Mario Sznol, MD: Consultant for Genentech/Roche, BMS, AZ/ MedImmune, Pfizer, Nektar, Lilly, Merck and Alexion. Stock/ Shareholder in Adaptive Biotechnologies. Scientific Advisory Board for Lion Biotechnologies and Adaptimmune.

Prior Plenary 1 Presentations on *SWOG Website*

- ADCs, Genomics, Ethics, Immune Therapy, Cell Signaling, etc.
- NCTN Correlative Sciences Committee overview by Elise Kohn, MD, CTEP
 - How to request tissues from trials that have closed (Fall, 2015)

Quick Overview of Translational Medicine at SWOG

- The vast majority of work is done within each committee: thanks to all for your commitment and expertise
- **Immuno-Oncology Biomarker Mini-retreat Tonight 6 PM**
 - Open session: Short didactic talks on various aspects of

Thanks to NCI, The Hope Foundation, and ITSC Partners for support on innumerable initiatives!

- JAX August 31-September 2, 2016
 - *CSHLs – Summer 2017, 16 SWOG members selected*
- Overview of funding opportunities

Immuno-Oncology Biomarker Retreat

- **FDA Blueprint Project: Comparing current used PD-L1 assays**
Fred Hirsch, University of Colorado
- **Multiplexed quantitative immune-profiling in tumor tissues**
Kurt Schalper, Yale
- **Beyond Expression Level: How spatial relationships between cells and biomarkers add to predictive power**
Paul Thompson, University of Michigan
- **Multi-omic analysis of tumor and immune cells**
Priti Hodi, Dana-Farber Cancer Institute
- **The Microenvironment: Biomarkers and therapeutic targets**
David H. Munn, University of Texas at Austin
- **CIBER: Integrating multi-omic data to identify biomarkers**
Aaron Newman, Stanford
- **Is all the information in the tumor cell? Mutation and pathway analyses as predictive biomarkers**
Roger Lo, UCLA
- **Is all the information in the T-cell infiltrate? TCR and activation analyses of Tumor T-cell infiltrates**
Larry Fong, UCSF

GRAND A Ballroom
6-8 PM

ITSC Workshop 2016

JAX Labs,
Bar Harbor, Maine



SWOG Participants

Lauren Byers	MD Anderson
Young Kwang Chae	Northwestern
Antonio Giordano	MUSC/Hollings
Kathryn Gold	UCSD/Moores
Jill Hamilton Reeves	University of Kansas
Alex Herrera	City of Hope
Gregory Idos	USC/Norris CCC
Paul Oberstein	Columbia
Jonathan Riess	UC Davis
Priyanka Sharma	University of Kansas
Brandon Smaglo	Baylor
Davendra Sohal	Cleveland Clinic

41 SWOG members trained at the ITSC Workshops over the last 3 years!!

JAX Participants

JAX Participants	CSHLs Participants
Susie Airhart	Jean Albrenques
Carol Bult	Joan Alexader
Kin-Ho Chow	Ken Chang
Dan Gatti	Mikala Egeblad
Jim Keck	Alex Krasnitz
Thomas Litwin	Scott Lyons
Ed Liu	Alea Mills
Bonnie Lyons	Denise Roberts
Joan Malcolm	Herve Tiriatic
Karolina Palucka	David Tuveson
Honey Reddi	Johannes Yeh
Paul Robson	Lingbo Zhang
Lenny Shultz	
Barbara Tennent	
Chia-Lin Wei	
Charlie Wray	
Jeff Chuang	
Jennifer Trowbridge	

ITSC Topics Discussed

ITSC Discovery Engine – introduction to components

Genomic technologies	Wei
Single cell DNA analytics	Alexander
Single cell transcriptomics	Robson
Organoid systems	Tiriac
RNAi screens	Chang
PDX models	Chow/Lyons
Diversity mouse strains	Gatti

Matching discovery science to compelling problems in cancer medicine

Approaches to cancer vaccines	Palucka
Preclinical trials of checkpoint inhibitors	Keck
Mechanisms of resistance	
tumor microenvironment	Egeblad
targeting leukemic progenitor cells	Zhang
targeting epigenomic regulators of leukemic progenitor cells	Trowbridge
tumor heterogeneity	Chuang
Biomarker discovery, predictive genomics	
Antibody and phage display	Yeh
Clinical genomics	Reddi

Pilot Project Awards 2016 That Emanated from Collaborations at ITSC Workshop

- Tumor Heterogeneity and Therapeutic Resistance in Small Cell Lung Cancer. **Co-PIs:** Lauren Averett Byers (MD Anderson Cancer Center) & Paul Robson (JAX)
- Impact of cystectomy and immunonutrition on formation of metastasis-promoting neutrophil extracellular DNA traps. **Co-PIs:** Jill Hamilton Reeves (University of Kansas) & Mikala Egeblad (CSHL)
- Pilot Study to Evaluate Circulating Tumor DNA in Follicular Lymphoma. **Co-PIs:** Alex Herrera (City of Hope) & Honey Reddi (JAX)
- Characterization of Statins for the Chemoprevention of Colorectal Cancer in Pre-Clinical Models of Lynch Syndrome. **Co-PIs:** Gregory Idos (USC), David Tuveson (CSHL) & Herve Tiriack (CSHL)
- Evaluation of a Genomic Predictor Algorithm (GPA) for platinum plus taxane sensitivity in Triple Negative Breast Cancer (TNBC). **Co-PIs:** Priyanka Sharma (University of Kansas) & Honey Reddi (JAX)

Congratulations to the 2017 ITSC Workshop Participants!

Ahi Ibrahim	Mitri	OHSU
Aki	Morikawa	University of Michigan
Aaron	Scott	University of Arizona
Corey	Speers	University of Michigan
Ari	Vander-Walde	University of Tennessee
Juan Carlos	Varela	MUSC
Dan	Wahl	University of Michigan
John	Wrangle	MUSC

Hani	Babiker	University of Arizona
Pavani	Chalasani	University of Arizona
Erin	Cobain	University of Michigan
Alexey	Danilov	OHSU
Austin	Kirschner	Vanderbilt University
Jessica Taft	Leonard	OHSU
Bora	Lim	MD Anderson
Joseph	Markowitz	Moffitt

***LOI for RFA for Pilot Projects due July 1 following
workshop at CSHLs June 12-14***

Funding

- Generous support of The Hope Foundation
- U01CA180994 – Drs. Tuveson, Liu, and Baker, PIs
- The Jackson Laboratory
- Cold Spring Harbor Laboratory

THE HOPE FOUNDATION

Because answers to cancers come from clinical trials

SWOG Early Exploration and Development (SEED) Fund	Up to \$50,000 – Funding preliminary research that will translate to clinical trials or trial-associated projects; 1 or 2-year projects	Next deadline July 1, 2017
SWOG Impact Award Program	Up to \$250,000 – Mechanism for translating scientific discovery to patient care; intended to encourage innovative approaches; 1 or 2-year projects	Next deadline September 1, 2017

All funding opportunities: thehopefoundation.org/research-funding

Plenary 1: Translational Medicine

3:00 – 3:10 pm

Introductory comments

Lee M. Ellis, MD, FACS, FASCO

SWOG Vice Chair for Translational Medicine

3:10 - 3:35 pm

Lessons learned from a decade of Precision Medicine at PMH: Where do we go from here?

Lillian Siu, MD, FRCPC, FASCO, Princess Margaret Cancer Centre

3:35 – 4:00 pm

Combination Immune Therapy

Mario Sznol, MD, Yale School of Medicine

4:00 - 4:25 pm

Building Teams in Cancer Research: SU2C

Marge Foti, PhD, MD (hc), CEO American Association for Cancer Research

