Starr Cancer Consortium Retreat

Cold Spring Harbor Laboratory, April 29 – April 30, 2019

Monday, April 29, 2019

9:00 – 11:00 am		***Attendee Arrival and Check In***	**(Grace Auditorium Lobby)**
11:00 am		***Welcome and Opening Remarks*** David Spector Director of Research Cold Spring Harbor Laboratory	**(Grace Auditorium)**
11:10 am – 12:30 pm		***Plenary Session – 1*** Chairs: David Spector & Leemor Joshua-Tor	**(Grace Auditorium)**
11:10 am	**1**	Omar Abdel-Wahab	*Dissecting micro-environmental contributions to the pathogenesis of myelodysplastic syndromes*
11:30 am	**2**	Lisa Giulino Roth	*Modulation of viral latency in EBV-associated lymphomas as a mechanism to sensitize tumors to EBV-directed cellular therapy*
11:50 am	**3**	Ari Melnick	*Defining the cellular origin and mechanistic basis for therapy resistant B-cell lymphomas*
12:10 pm	**4**	Wouter Karthaus	*Transcriptional reprogramming drives cancer cell heterogeneity and drug resistance*
12:30 – 2:00 pm		***Lunch***	**(Blackford Hall)**
2:00 – 3:20 pm		***Plenary Session - 2*** Chairs: Titia de Lange & Lisa Giulino Roth	**(Grace Auditorium)**
2:00 pm	**5**	Eliezer Van Allen	*Patient-driven molecular characterization of rare and refractory germ cell tumors*
2:20 pm	**6**	Lukas Dow	*Investigating cancer-associated structural genomic rearrangements using* in vivo *genome editing*

2:40 pm	**7**	Marcin Imielinski	*Deciphering signatures of broken DNA repair pathways in long-range cancer whole genome sequences*
3:00 pm	**8**	Rona Yaeger	*Defining key genomic alterations in the carcinogenesis of colitis-associated cancers*
3:20– 4:10 pm		***First Poster Session (with Coffee Break)***	**(Grace Lobby & Patio)**
4:10 – 5:10 pm		***Plenary Session - 3*** Chairs: Joan Massagué & Elaine Fuchs	**(Grace Auditorium)**
4:10 pm	**9**	Gabriel Victora	*Tracking T cell-antigen presenting cell contacts within tumors* in vivo
4:30 pm	**10**	Richard White	*An* in vivo *CRISPR screen for melanoma progression in zebrafish*
4:50 pm	**11**	Hans-Guido Wendel	*Dissecting SHMT2 function as a metabolic driver of lymphomagenesis*
5:30 – 6:00 pm		***Wine and Cheese Reception (Posters available)***	**(Grace Patio)**
6:00 – 7:00 pm		***Banquet Dinner***	**(Mayr Dining Room, Blackford Hall)**
7:10 – 8:10 pm		***Plenary Session - 4*** Chairs: Todd Golub & Rona Yaeger	**(Grace Auditorium)**
7:10 pm	**12**	Lydia Finley Sanjeethan C Baksh	*Dissecting the metabolic regulation of tumor initiating stem cells*
7:30 pm	**13**	Gina Lee	*Biochemical and genetic investigation of oncogenic TOR-dependent regulation of RNA metabolism and tumorigenesis using cross-species approaches*
7:50 pm	**14**	Ross Levine	*Clonal hematopoiesis as a driver of adverse clinical outcome*

End of Day One

Tuesday, April 30, 2019

8:50 – 9:50 am		***Plenary Session - 5*** **(Grace Auditorium)** Chairs: Lewis Cantley & Lydia Finley	
8:50 am	**15**	Sanford Simon	*High throughput identification of apoptosis sensitizing compounds in fibrolamellar hepatocellular carcinoma*
9:10 am	**16**	Hans-Guido Wendel	*Exploring the eIF4A RNA helicase as a new cancer drug target*
9:30 am	**17**	Michael Yaffe	*Mechanism-based targeting of RNA binding protein networks for chemo-sensitization in non-small cell lung cancer (NSCLC)*
9:50 – 10:40 am		***Second Poster Session (with Coffee Break)*** **(Grace Lobby & Patio)**	
10:40 – 12:00 noon		***Plenary Session - 6*** **(Grace Auditorium)** Chairs: Craig Thompson & Monica Guzman	
10:40 am	**18**	Christopher Park	*Identifying RNA-binding proteins as a novel class of therapeutic targets in glioblastoma cancer stem-like cells*
11:00 am	**19**	Dan Landau	*Discovery of epigenetic drivers of tumor evolution*
11:20 am	**20**	Michael Kharas	*The mRNA methylation program in leukemia*
11:50 am		***Closing Remarks*** Executive Committee	
12:00 pm – 1:00 pm		***Attendee Departure - Lunch Available***	

Poster Presentations

Posters are displayed for the duration of the Retreat. Posters are presented in two poster sessions. Each poster's presenter will be available at his/her poster during the assigned session. Session assignments are listed in the right-hand column.

Session 1: Monday, April 29 3:20 – 4:10 pm
Session 2: Tuesday, April 30 9:50 – 10:40 am

Abstract			Session
21	Jimmy L. Zhao	*Defining prostate cancer cells of origin through single cell profiling*	**1**
22	Jessica Tyler Scott Keeney	*Genomic instability in the chromosomal context of physiological DNA double-strand break formation*	**2**
23	Bishoy Faltas	*APOBEC mutagenesis in bladder cancer: mechanisms and therapeutic opportunities*	**1**
24	Kayvan Keshari	*Imaging and targeting glycolytically driven oxidative stress using ascorbate*	**2**
25	Adi Y. Berman Megan E. Kelley	*Using morphological pharmacodynamic markers to analyze drug sensitivity, resistance, and toxicity*	**1**
26	Tiantian Zhang	*The function and regulation of MiT/TFE activation in autophagy and pancreatic ductal adenocarcinoma*	**2**
27	Yosef E. Maruvka	*Lynch syndrome colorectal cancer immunoprevention using recurrent neoantigen peptide vaccination*	**1**
28	Kivanc Birsoy	*Identification of transcriptional determinants of asparaginase sensitivity in leukemias*	**2**

29	Samie Jaffrey	*Real-time imaging of metabolic deregulation in cancer*	**1**
30	Samie Jaffrey	*A massively parallel protein synthesis platform for functional screening of cancer proteomes*	**1**
31	Lingling Dai Deyao Li	*Targeting the chromatin reader protein TRIM33 as a cancer therapy in B cell acute lymphoblastic leukemia*	**2**
32	Pei Xin Lim	*RAD51 mutations reported in tumors and Fanconi anemia patients cause a range of cellular defects*	**1**
33	Dawid G. Nowak	*The PHLPP2 phosphatase is a druggable driver of prostate cancer metastasis*	**2**
34	Xiaochuan Cai	*Designing sinefungin scaffolds as specific protein methyltransferase inhibitors*	**2**
35	Chao Zhang	*The impact of the gastric microbiome on gastric cancer development*	**1**
36	Daniel Fuerth	*Translating molecular profiles into clinical biomarkers using spatially defined RNA sequencing* in situ	**2**
37	Aleksey Chudnovskiy	*Tracking T cell-antigen presenting cell contacts within tumors* in vivo	**1**
38	Elizaveta Lavrova	*Identifying apoptotic chemical sensitivities in fibrolamellar hepatocellular carcinoma using dynamic Bh3 profiling*	**2**
39	Sanjeethan C Baksh	*Extracellular serine dependence restricts αKG driven differentiation in oncogenic stem cells*	**1**

40	Diu Nguyen	*The mRNA methylation program in leukemia*	**2**
41	Nathaniel R. Campbell	*Heterogeneous cell clusters promote melanoma metastasis via cell-cell cooperation*	**1**
42	Nevin Yusufova	*Elucidating the etiologic role of linker histone mutations in hematological malignancy*	**2**
43	Andrew Chow	*Identification of tumor cell and microenvironmental determinants of response to immune checkpoint blockade in lung cancer*	**1**
44	Sylvie Le Blancq	*Starr Technology Commercialization Fund*	**1**