February 2016

Recent & Upcoming Events

January 29-5, HCI 3 South  Bone-related Cancer Research
February 25, 4-5, HCI 3 South  Program Meeting, Dan Fults
March TBD  New member round-table
April TBD  Melanoma Grant Planning

Recent Cancer-Focused Pubs (not all-inclusive)

Preclinical Efficacy of Ron Kinase Inhibitors Alone and in Combination with PI3K Inhibitors for Treatment of sfRon-Expressing Breast Cancer Patient-Derived Xenografts.

Inhibition of bcr-abl in human leukemic cells with a coiled-coil protein delivered by a leukemia-specific cell-penetrating Peptide.

The role of thioredoxin reductase 1 in melanoma metabolism and metastasis.

AKT1 Activation Promotes Development of Melanoma Metastases.

Comprehensive Molecular Portraits of Invasive Lobular Breast Cancer.

Structural insight into selectivity and resistance profiles of ROS1 tyrosine kinase inhibitors.
Davare MA,....Deininger , MW ET , O’Hare T (2015) PNAS 112:E5381

β-Catenin is required for intrinsic but not extrinsic BCR-ABL1 kinase-independent resistance to tyrosine kinase inhibitors in chronic myeloid leukemia.
Eiring AM,....O’Hare T , Deininger MW (2015) Leukemia 29:2328

Combined STAT3 and BCR-ABL1 inhibition induces synthetic lethality in therapy-resistant chronic myeloid leukemia.

PIK3CAH1047R accelerates and enhances KRASG12D-driven lung tumorigenesis.

Somatic cell transfer of c-Myc and Bcl-2 induces large-cell anaplastic medulloblastomas in mice.

The acinar differentiation determinant PTF1A inhibits initiation of pancreatic ductal adenocarcinoma.
Krah NM,....Bronner MP, Murtaugh LC (2015) Elife 4

Structure and membrane remodeling activity of ESCRT-III helical polymers

Oct1 and OCA-B are selectively required for CD4 memory T cell function.

CRR Members

Adam Frost, MD, PhD
Alana Welm, PhD
Bryan Welm, PhD
Carol Lim, PhD
Charlie Murtaugh, PhD
Dan Fults, MD
Dean Li, MD, PhD
Diana Stafforini, PhD
Doug Grossman, MD, PhD
Gillian Stanfield, PhD
Guy Zimmerman, MD
Jan Christian, PhD
Joely Rosenblatt, PhD
June Round, PhD
Julie Kadrmas, PhD
Katie Ullman, PhD
Martin McMahon, PhD
Mary Beckerle, PhD
Matt Topham, MD
Matt VanBrocklin, PhD
Matt Williams, PhD
Michelle Mendoza, PhD
Philip Moos, PhD
Rachel Factor, MD
Rod Stewart, PhD
Sheri Holmen, PhD
Tom O’Hare, PhD
Trudy Oliver, PhD
Wes Sundquist, PhD

*CRR leader
CRR member Jerry Spangrude retired this past summer. We will miss his expert insight into hematopoiesis as well as his good humor.

Two interest groups relating to skeletal – cancer connections recently nucleated. One is focused on bone-related toxicity in cancer treatment (recent minisymposia) and the other is centered on therapy in the context of bone metastasis. If you are interested in learning more about either, please contact Katie for further info.

Note: When submitting manuscripts in which Cancer Center Supported Cores have been used, please include a statement along these lines in the acknowledgements: “We acknowledge the use of core facilities supported by P30 CA042014 awarded to Huntsman Cancer Institute.”

FYI, here are links to NCI RFAs and PAs.

New Members

Martin McMahon is a professor in the department of Dermatology with an adjunct appointment in Oncological Sciences. He joined HCI in 2015, coming most recently from UCSF. His research centers on understanding and targeting signaling pathways that underlie tumorigenesis, particularly in melanoma and lung cancer. Martin is the Senior Director of Pre-Clinical Translation at HCI and President of The Society for Melanoma Research.

Michelle Mendoza joined the faculty of the Department of Oncological Sciences as an assistant professor in 2015. She is interested in signaling pathways that control cell migration and cancer invasion, and is currently focused on the Ras/ERK-MAPK pathway in this context.

New Externally-Funded Projects (not all-inclusive)

McMahon  
Studying the initiation, progression and therapy of lung cancer in mouse models, NCI R01

Targeting oncogenic BRAF and PI3'-kinase signaling for melanoma therapy, NCI R01*

A. Welm  
Investigation of the Genomics and Biology of Metastasis Using Patient-Derived Xenografts, Breast Cancer Research Foundation/Baylor*
*in process of transfer

New CRR-Funded Projects

Stewart/Engel  
Gfi1b-Dependent Control of Pediatric Brain Tumor Progression through LSD Recruitment

Joint w/NC  
Computationally Guided Screening and Optimization of ROS1 Kinase Inhibitor for Use in Crizotinib-Resistant Non-Small Cell Lung Cancer -collaborator: Wallace Akerley

O'Hare  
Engineering CRISPR-based tTechnologies for Genome Editing In Vivo

Travel awards are given on a rolling basis to help defray costs for cancer-focused meetings that are important professional opportunities for members or their trainees. Please get in touch with Katie if you are interested in applying for a CRR Travel Award.