RADIATION ONCOLOGY/CRR RESEARCH RETREAT - ICRC Auditorium

Friday, November 4th, 2022

8:30 a.m. to 4:30 p.m.

TIME	SPEAKER	PRESENTATION
8:30 - 8:35	Dr. Tom Hei:	Welcome
8:35 - 9:05	**Keynote Lecture 1**: **Dr. Kenneth Olive** *Finding and Targeting Critical Dependencies of Pancreatic Ductal Adenocarcinoma* Chair: Dr. Catherine Spina	
9:05 - 9:20	Dr. Katrina Armstrong:	Remarks from the Dean
	Session 1: Artificial Intelligence in Clinical Medicine Chair: Drs. Lisa Kachnic and Guy Garty	
9:20 - 9:40	Dr. Binsheng Zhao:	AI in Radiographic Assessment of Tumor Response
9:40 - 10:00	Dr. Peter Canoll:	AI in Pathological Assessment
10:00 - 10:20	Dr. James Yu:	AI in Radiation Treatment
10:20 - 10:40	**Break and Poster Viewing**	
	Session 2: Heavy ions in Clinical Medicine and Space Research Chair: Dr. David Horowitz	
10:40 - 11:00	Dr. David Brenner:	Heavy Ions Radiotherapy in the US and Preclinical Studies at RARAF
11:00 - 11:20	Dr. Tom Hei :	Heavy Ions in Space: Potential Show- Stopper for Mars Mission?
11:20 - 11:50	**Keynote Lecture 2: Dr. Harris Wang** *Using CRISPR Systems to Enhance Radiation Resiliency* Chair: Dr. Sally Amundson	
11:50 - 12:00 pm	***Presentation of the 1st Steven Isaacson Memorial Award*** Dr. David Horowitz	
12:00 - 1 :00	**Lunch and Poster Viewing Session**	
	Session 3: **Topical Issues and Short Poster Presentations** Chair: Drs. Christine Chin and Andrew Harken	
1:00 - 1:15	Dr. Connor Kinslow:	MGMT Promoter Methylation Status and Glioma Survival
1:15 - 1:30	Dr. Leah Nemzow:	Radiosensitive Protein Biomarker Detection in a Human Peripheral Blood Ex Vivo Model
1:30 - 1:35	Dr. Kareem Rayn:	Multimetric MRI as a Predictor of PSA Response in Prostate Cancer Patients Treated with SBRT Therapy
1:35 - 1:40	Dr. Igor Shuryak:	Development of a High-Throughput Machine Learning Approach for Detecting and Quantifying Partial Body Radiation Exposures
1:40 - 1:45	Dr. Shanaz Ghandhi:	Cross-Platform validation of a Mouse Blood Gene Signature for Quantitative Reconstruction of Radiation Dose
1:45 - 1:50	Dr. David Welch:	66-Week Chronic Exposure of Hairless SKH-1 Mice to 222-nm Far-UVC Radiation
	Session 4: **Targeted Therapy and Modulations of Treatment Outcome: Future Perspective** Chair: Drs. Israel Deutsch and Manuela Buonanno	
1:50 - 2:10	Dr. Catherine Spina:	Radioimmunotherapy for Pancreatic Cancer
2:10 - 2:30	Dr. Eileen Connolly:	Notch Signaling and Radioimmunotherapy in Breast Cancer

2:30 - 2:50	Dr. Fred Wu:	FUS and its Future in Clinical Medicine
2:50 - 3:10	**Break and Poster Viewing**	
	Session 5: Brain Storming on Program Development with Discussion Leads	
3:10 - 3:40	Drs. Sally Amundson, Catherine Spina and David Brenner Biomarkers for Radiosensitivity and Response	
3:40 - 4:10	Drs. Tony Wang, Simon Cheng and Michael Price: Adaptive Radiation Therapy: Our Next Multi-Investigator Grant Initiative	
4:10 - 4:30	**General Discussion and Closing** Chair: Drs. Tom Hei and Lisa Kachnic	

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Presenter	TITLE
Dr. Kareem Rayn	*Multiparametric MRI as a Predictor of PSA Response in Patients SBR Therapy for Prostate* Kareem Rayn, Albert Lee, Elizaveta Lavorva, Matthew Gallitto, Mark Mayeda, Mark Huang, Oscar Padilla, Catherine Spina, Israel Deutsch, Lawrence Koutcher
Dr. Connor Kinslow	*Breast Cancer Subtypes and Incidence of Brain Metastasis in the SEER Database* Connor Kinslow, Jonathan Knisely, Simon Cheng, Eileen Connolly, Tony Wang and James Yu
Dr. Manuela Buonanno	*Far-UVC Radiation (222 nm) Inactivates Airborne Murine Norovirus within an Animal Facility - a Proof-of-Concept Study for Reducing Airborne Disease Transmission* Manuela Buonanno, David Welch, Joseph Zakaria, Norman Kleiman and David J. Brenner
Dr. Ekaterina Royba	*Development of a Same-Day RABiT-II Dicentric Chromosome Assay* Ekaterina Royba, Brian Ponnaiya, Guy Garty and David Brenner
Dr. Guy Garty	*Irradiation Platforms for Modeling IND Exposures* Guy Garty, Naresh Deoli, Brian Ponnaiya, David J. Brenner
Dr. Igor Shuryak	*Development of a High-Throughput Machine Learning Approach for Detecting and Quantifying Partial Body Radiation Exposures* Igor Shuryak, Guy Garty, Bezalel A. Bacon, Leah E. Nemzow, Brian Ponnaiya, Xuefeng Wu, Maria Taveras, David J. *Brenner, Helen C. Turner*
Dr. Shanaz Ghandhi	*Cross-Platform Validation of a Mouse Blood Gene Signature for Quantitative Reconstruction of Radiation Dose* Shanaz A. Ghandhi,,Igor Shuryak, Brian Ponnaiya, Xuefeng Wu, Guy Garty, Shad Morton, Salan Kaur and Sally Amundson.
Dr. Naresh Deoli	*Development of Flexible Tools for Cancer Research at RARAF - I: Combining Singletron and RFQ LINAC Accelerator Systems to Produce a Wide Range of Mono-LET Beams for 3-D Tissue Exposures* Naresh T. Deoli, Andrew D. Harken, Guy Garty, Don Swenson, Tim Pressnall, Mark Curtin, and David J. Brenner
Dr. Andrew Harken	*Development of Flexible Tools for Cancer Research at RARAF - II Focused Ion Beam Irradiation Platform with Integrated SCAPE Volumetric Imaging* Andrew D. Harken, Naresh T. Deoli, Citlali P. Campos, Brian Ponnaiya, Peter Grabham, Guy Garty, Elizabeth Hillman, and David J. Brenner
Dr. Constantinos Broustas	*Impact of Sex and Age on Gene Expression-Based Radiation Biodosimetry Using Mouse Peripheral Blood* Constantinos G. Broustas, Axel J. Duval, Igor Shuryak and Sally A. Amundson

Dr. David Welch	*66-Week Chronic Exposure of Hairless SKH-1 Mice to 222-nm Far-UVC Radiation* David Welch, Norman J. Kleiman, Peter C. Arden, Christine L. Kuryla, Joseph Zakaria, Manuela Buonanno, Brian Ponnaiya, Xuefeng Wu, and David J. Brenner