

DTRA Life Sciences Project Review			
DAY ONE, 20 June 2017			
9:00 - 9:15a	Life Sciences Portfolio Overview	Heather Meeks	DTRA
9:15 - 9:45a	Molecular-Level Understanding of Enzyme-Surface Interactions on Complex Surfaces and Its Impact on Sensing Uranyl Cations	Zhan Chen	University of Michigan
9:45 - 10:15a	Enzyme Cascades	Henry Hess	Columbia University
10:15 - 10:45a	Tailoring Protein-Based Nanocontainers as Catalytic Systems for Sensing and Reporting	Claudia Schmidt-Dannert	University of Minnesota
10:45 - 11:00a	BREAK		
11:00 - 11:30a	Using Coacervates to Maximize Enzymatic Activity at Interfaces for Heavy Metal Detection	Bradley Olsen	MIT
11:30 - 12:00p	Predictive Structure-Function Relationships for Enzymes Immobilized on Complex Surfaces	Mark Blenner	Clemson University
12:00 - 12:30p	Determining the Mechanistic Basis for Surface Interactions and Effects on Catalytic Efficiency in Tethered Enzyme	Daniel Schwartz	University of Colorado
12:30 - 1:30p	LUNCH		
1:30 - 2:00p	Deinococcus radiodurans Mn2+ Complexes: A Revolutionary Approach to Radioprotection and Vaccine Production	Barbara Knollmann-Ritschel	USUHS
2:00 - 2:30p	Investigating RNA-Mediated Regulatory Mechanisms in Radioresistant Bacteria	Lydia Contreras	University of Texas Austin
2:30 - 3:00p	Ab-Initio & Semiempirical Investigation of Deinococcus Radiodurans Resistance to Ionizing & UV Radiation	Jorge Rodriguez	Purdue University
3:00 - 3:30p	Global Mass Spectrometry-Based Analysis of Covalent Modifications in Proteomes After Radiation	Michael Sussman	University of Wisconsin
3:30 - 3:45p	BREAK		
3:45 - 4:15p	The Role of microRNA (miRNA) Activation in Radioresistance of Melanized Fungi and Mammalian Cells	Mang Xiao	AFRRI
4:15 - 4:45p	Investigation of Radiation Resistance Mechanisms in Melanized Fungi	Ekaterina Dadachova	University of Saskatchewan
4:45 - 5:15p	Investigating Radiation-Induced Damage During Translation in Melanized Fungi	Patrick Limbach	University of Cincinnati
DAY TWO, 21 June 2017			
9:00 - 9:15a	Life Sciences Portfolio Overview	Peter Vandeventer	DTRA
9:15 - 9:45a	Acute Radiation Response of Mammalian Stem Cells	Charles Limoli	University of California Irvine
9:45 - 10:15a	Wartime Radiation Exposure: Epigenetic Regulation of the CNS Response	Janet Baulch	University of California Irvine
10:15 - 10:45a	Epigenetic Mechanisms in the Recovery of the Bacterium Deinococcus radiodurans and Melanized Fungi Exposed to Ionizing Radiation	Michael Daly	USUHS
10:45 - 11:00a	BREAK		
11:00 - 11:30a	Development of Brassica as a Low Dose Radiation Biosensor	Patrick Concannon	University of Florida
11:30 - 12:00p	Discriminatory Transcriptional Response of Environmental Microorganisms and Microbial Communities to Low-Dose Ionizing Radiation	Nicole Martinez	Clemson University
12:00 - 12:30p	Codon Usage in Morbilliviruses: Evidence for Evolutionary Conservation and Importance for Adaptation to New Hosts	Elizabeth Uhl	University of Georgia
12:30 - 1:00p	Flow-through Capture Filters for Enhancing Antibody-Antigen Binding Kinetics	Jeremy Driskell	Illinois State University
1:00 - 1:15p	BREAK		
1:15 - 3:15p	POSTER SESSION/LUNCH		