

The following is a list of the pilot projects funded through the Opportunities Fund Management Core of the Centers for Medical Countermeasures against Radiation Consortium (CMCRC) since its inception. All funding decisions are made based on the reviews and ranking of proposals by a panel of expert external reviewers with no affiliation with the CMCRC.

PI	Institution	Project Title
Newly funded in 2018		
Bhat, Kruttika	UCLA	Radiation Mitigation and Peyer's Patches
Kulka, Ulrike	Federal Office for Radiation Protection, Germany	Biodosimetry Approaches for Large Scale Neutron Exposure Scenarios
Laiakis, Evagelia	Georgetown University	Identification of Tissue Sources of Biomarkers with Mixed Neutron Field Exposures for Risk Assessment
Morowitz, Michael	University of Pittsburgh	Effects of the GUT Microbiota on Response to JP4-039 Therapy after Radiation Injury
Palis, James	University of Rochester	Combination therapy to mitigate hematopoietic acute radiation syndrome (H-ARS)
Ponnaiya, Brian	Columbia University	Identification and Validation of Potential biomarkers of Radiation-induced Cardiac Damage
Pujol Canadell, Monica	Columbia University	Improved High-throughput Cytogenetically-based Biodosimetry after High Dose of Radiation
Shuryak, Igor	Columbia University	Retrospective estimation of protracted radiation doses using radiation-responsive biomarkers in human lymphocytes
Winkfield, Karen Marie	Wake Forest University	Evaluation of a Red Duroc Porcine Model to Address Cutaneous Radiation Injury in Black (Types III/VI) Skin
Newly funded in 2017		
Allen, Antiño Recio	University of Arkansas	Combating Oxidative Stress and Inflammation after Radiation Combined Injury
Broustas, Constantinos	Columbia University	Impact of aging on gene expression response to x-ray irradiation using mouse blood
Caudell, David L and Yu, Jian	Wake Forest / U Pittsburgh	Immunophenotyping of the Intestinal Mucosal Immune System in Irradiated Monkeys
Day, Regina M.	The Henry M. Jackson Foundation for the Advancement of Military Medicine	Inhibitors of Accelerated Senescence as Radiation Countermeasures

Doan, Phuong Linh	Duke University	Endothelial cell-derived Extracellular Vesicles Accelerate Marrow Regeneration
Finkelstein, Jacob	University of Rochester	Mitigation of Radiation Induced Increased Sensitivity to Respiratory Infection
Ghandhi, Shanaz	Columbia University	Transcriptomics in a Non-Human Primate Model of Radiation Biodosimetry and Survival
Pannkuk, Evan	Georgetown University	Metabolomics of shorter-term and delayed effects of acute radiation exposure in nonhuman primates
Pecaut, Michael J.	Loma Linda University	Exosomal micro RNA: A potential organ-specific biodosimeter
Register, Thomas	Wake Forest University	Monocyte Polarization in Acute and Delayed responses to Total Body Irradiation in Nonhuman Primates
Weidhaas, Joanne	UCLA	Using germ-line microRNA based mutations as biodosimeters
Wilkins, Ruth	Health Canada	The Cytokinesis-Block Micronucleus Assay as an Emergency Response Biodosimeter
Xiao, Mang	The Henry M. Jackson Foundation for the Advancement of Military Medicine	IL-18 Binding Protein (IL-18BP) as A novel Countermeasure after Radiation Exposure
Funded in 2016		
Ainsbury, Liz	Public Health England	Multi-panel coding and non-coding transcriptional responses as an indicator of individualised responses to radiation effects in radiation therapy (RT) patients
Chen, Emily	Herbert Irving Comprehensive Cancer Center, Columbia University	Biodosimetry using ATM serine-1981 phosphorylation
Coleman, Matthew	UC Davis	Identification Of Predictive Biomarkers For Radiation Injury From Circulating Serum and urine exosomes
Grabham, Peter	Columbia University	Biodosimetry of exposure to internalized ¹³¹ I in human cancer patients
Lue, Stanley	Columbia University	Mitigation of GI syndrome
Terzoudi, Georgia	Institute of Nuclear & Radiological Science & Technology, Energy & Safety, National Centre for Scientific Research “Demokritos”, Athens, Greece	Potential use of blood-born endothelial microparticles as a biodosimetry tool for the characterization of radiation exposure

Finholt-Daniel, Andrea	Duke University, Durham, NC	Novel humanized models of genetically-modified and lipid supplemented yeast cells (<i>S. cerevisiae</i>) for screening and selection of radiomitigators targeting the regulatory lipid mediators-generating iPLA2 pathways
Kang, Yubin	Duke University Medical Center	DKK1 mediates hematopoietic stem cell regeneration following radiation injury
Kavanagh, Kylie	Wake Forest School of Medicine	biological and molecular mechanisms through which thioredoxin protects HSCs from radiation injury
Racioppi, Luigi	Duke University, Durham, NC	Restoring tissue HSP90 levels post-irradiation to prevent T2DM as a delayed effect of radiation
Sunday, Mary	Duke University	Mitigation of Radiation Induced Damage to the Cardiac Conduction System by Mitochondrial Superoxide Scavengers
Bakkenist, Chris	University of Pittsburgh School of Medicine	Proteomics for rapid biodosimetry
Glowacki, Julie	Harvard Medical School	Development of water soluble derivatives of 4-(nitrophenylsulfonyl)piperazines as prospective mitigators of radiation injury
Greenberg, Miriam	Wayne State University	High Throughput Screening for Radiation Antibody Signatures with peptide arrays
London, Barry	University of Iowa Carver College of Medicine	Development of estrogen receptor- β ligands as medical radiation mitigators
Himburg, Heather	UCLA	Determining the mechanism of the protective of action of STO-609, a CaMKK2 inhibitor, in acute radiation syndrome
Nickols, Nicholas	UCLA	Oxygen, Gastrin-Releasing Peptide, and Radiation-Induced Pulmonary Fibrosis
Pietras, Richard	UCLA School of Medicine	Automate image acquisition and analysis for two biodosimetry assays using Centromeric / Telomeric PNA probes or Giemsa staining to score dicentrics or excess fragments in nonstimulated lymphocyte prematurely condensed chromosomes (PCCs)
Tigyi, Gabor	University of Tennessee	Mitigation of Radiation-induced Intestinal Barrier Damage by Radioprotectin-1
Williams, Jacqueline	University of Rochester Medical Center	Acute and late outcomes of compounds targeting ARS