University of Pittsburgh

School of Medicine
Department of Radiation Oncology

200 Lothrop Street
Pittsburgh, Pennsylvania 15213
Phone: 412-647-3607
Fax: 412-647-6029

Joel Greenberger, MD
Professor and Chairman

TO: UPCI Researchers/School of Medicine Researchers
FROM: Joel S. Greenberger, M.D.
DATE: November 17, 2005
SUBJECT: Radiation Biology Education and Training Award through the Center for Medical Counter Measures Against Radiation (CMCR) Program

The University of Pittsburgh Cancer Institute Center for Medical Counter Measures Against Radiation (CMCR) Program funded under the auspices of the NIAID (National Institutes of Allergy and Infectious Diseases), Joel S. Greenberger, M.D., Principal Investigator, is seeking applications from qualified scientists for Education and Training in Radiation Biology. Please see the following announcement for award and application details.

Title:	**Radiation Biology Education and Training Award** UPCI Center for Medical Counter Measures Against Radiation (CMCR)
Purpose:	To provide funding for education and training in mitochondrial mechanisms of radiation damage and protection. This training support is designed to help researchers become competitive for new grants in the disciplines of radiobiology, chemistry of radioprotection, and radiation pathology.
Deadline(s):	**January 1, 2006**
Review/Award Information:	One-year awards in the range of $25,000 to $40,000 will be made.
Key Points:	• Funding levels for new grants in Radiation Protection are expected to increase as part of the National effort in Project Bioshield. To be competitive for such research support, training in these and related disciplines may be helpful. • We wish to include candidates who are working in other areas, but who might welcome a broadening of expertise or shift towards radiation biology research. For such individuals, we offer the possibility of a joint mentorship between your current mentor plus one of the PIs from the CMCR, with the latter to help develop a tailored plan for such broadening or shift in focus for a period of one year. • Applicants will be expected to have interaction and be synergistic with one or more of the projects in the CMCR (see attached announcement for complete list of Projects and Core Facilities).
Eligibility:	• **Postdoctoral fellows or junior faculty** in Chemistry/Drug Discovery or Radiation Biology of Mitochondrial Mechanisms of Irradiation Cellular Tissue and Organ Damage who seek one year funding (potential for second year of renewal). • **Graduate students** already involved in training programs in Radiation Biology of Mitochondrial Damage and Repair. • **Senior research specialists** (research laboratory technicians) working in Radiation Biology who seek retraining in specific disciplines required for new research and drug discovery relative to developing small molecules targeted to the mitochondria for radiation protection.

Applications and Instructions:	• **Full announcement and application instructions are provided in the attached document**. • **Applications should be sent to**: Joel S. Greenberger, M.D. Professor and Chairman, Department of Radiation Oncology University of Pittsburgh Medical Center 200 Lothrop Street Pittsburgh, PA 15213

Funding Opportunity for Education and Training in Radiation Biology

This training support is designed to help researchers become competitive for new grants in the disciplines of: radiobiology, chemistry of radioprotection, and radiation pathology. The funding levels for new grants in Radiation Protection are expected to increase as part of the National effort in Project Bioshield. To be competitive for such research support, training in these and related disciplines may be helpful.

The University of Pittsburgh Cancer Institute Center for Medical Counter Measures Against Radiation (CMCR) Program, Joel S. Greenberger, M.D., Principal Investigator, announces the availability of funding for education and training in mitochondrial mechanisms of radiation damage and protection.

One year funding is available for postdoctoral fellows, graduate students, and in specific cases technical specialists who under the supervision of their CMCR principal investigator seek new training or retraining in scientific techniques specific to radiation biology of mitochondrial radiation induced damage and protection.

Requirements for Applicant:

Applicant may be postdoctoral fellows or junior faculty in Chemistry/Drug Discovery or Radiation Biology of Mitochondrial Mechanisms of Irradiation Cellular Tissue and Organ Damage who seek one year funding (potential for second year of renewal); graduate students already involved in training programs in Radiation Biology of Mitochondrial Damage and Repair; or senior research specialists (research laboratory technicians) working in Radiation Biology who seek retraining in specific disciplines required for new research and drug discovery relative to developing small molecules targeted to the mitochondria for radiation protection (example: training in sub-cellular fractionation, mitochondrial membrane isolation, analyses of oxidatively/nitrosatively modified mitochondrial proteins, lipids, and DNA, mass spectrometry, or radiation pathology of specific murine organ damage from ionizing irradiation in the setting of test of new small molecule protectors).

We wish to include candidates who are working in some other areas, but who might welcome some broadening of expertise or shift towards radiation biology research. For such individuals, we offer the possibility to have a joint mentorship between current mentor plus one of the PIs from the CMCR, with the latter to help develop a tailored plan for such broadening or shift in focus for a period of one year.

Budget:

One year awards in the range of $25,000.00 to $40,000.00 will be made.

Application Procedure:

Applicants should send C.V. and letters of recommendation from their laboratory supervisor (principal investigator) and include specific tasks for training.

Applicants will be expected to have interaction and be synergistic with one or more of the projects in the CMCR.

Project 1: MnSOD-Plasmid Liposome mechanisms of radiation protection, and development of small molecule SOD mimetics. Joel Greenberger, M.D., Principal Investigator

Project 2: Cardiolipin/Cytochrome C interactions and the mitochondrial membrane, relative to radiation-induced apoptosis. Valerian Kagan, Ph.D., Principal Investigator

Project 3: Identification of new molecular targets for radiation protection based on the mitochondrial electron transport chain. James Peterson, Ph.D., Principal Investigator

Core Facilities Available Include:

Core A: Development of tet-inducible MnSOD transgenic mice for analysis of redox balance changes during irradiation. Richard Chaillet, Ph.D.

Core B: Innovative medicinal chemistry Peter Wipf, Ph.D./John Lazo, Ph.D.

Core C: Chemical process development Phil Yeske, Ph.D.

Core D: Biostatistics James Schlesselman, Ph.D.

Core E: Radiobiological standardization Mike Epperly, Ph.D.

Applications are due 1/1/06 and will be solicited annually.

Send applications to Joel S. Greenberger, M.D., Professor and Chairman, Department of Radiation Oncology, University of Pittsburgh Medical Center, 200 Lothrop Street, Pittsburgh, PA 15213.