広島統計談話会

Hiroshima Statistics Study Group

第227回談話会を下記のように開催致しますので 御参集下さいますよう御案内申し上げます。

You are cordially invited to the 227th meeting as scheduled below.

日 時: 2006年4月28日(金) 15:00-Date: April 28, 2006 (Fri) 15:00-

場所: 放射線影響研究所 講堂 Place: RERF Auditorium

演者: 許 婉玲(放射線影響研究所統計部研究員)

Speaker: Wan Ling Hsu, Research Scientist, Department of Statistics, Radiation

Effects Research Foundation

演 題: 「原爆被爆者に見られる放射線、炎症バイオマーカー、疾病の関係」

Title: "Relationship of Radiation, Inflammatory Biomarkers, and Diseases

among Atomic Bomb Survivors"

要 約:

Summary:

The atomic bombs in Hiroshima and Nagasaki claimed many lives and resulted in irreversible physical and psychological damage among the survivors. Radiation exposure not only significantly increased the risk of cancer, hepatitis, cataract, cardiovascular and autoimmune diseases, but also caused possible chronic low-grade inflammation. In recent years, there is a growing body of studies that have shown low-grade inflammatory response links to the aforementioned diseases. Given the causal associations of radiation, inflammation, and these diseases, the objectives of this study are to focus on whether radiation exposure causes long-term elevated levels of inflammatory response markers, and to elucidate possible long-term effects due to different levels of radiation exposure. In order to take into account of inter- and intra-individual variation, the mixed model was applied to examine the longitudinal trends of white blood cell, neutrophil, lymphocyte, and monocyte counts. Following that, the structural equation model was used to treat inflammatory marker as mediator in the causal relation of radiation and hypertension incidence.