You are cordially invited to the 250th meeting as scheduled below.

**Date:** September 11, 2009 (Fri) 15:00 –

**Place:** RERF Hijiyama Hall

**Speaker:** Yoshisuke Nonaka, Ph.D.
Visiting Research Fellow,
Department of Epidemiology,
Radiation Effects Research Foundation

**Title:** “Selection of relative risk model based on information criterion and application to the Life Span Study data”

**Abstract:**
Model selection is a crucial issue when constructing models from observed data and many statistical researchers proposed various methodologies for model selection. In particular, Akaike’s information criterion (AIC) is a simple and useful technique for selecting the parametric model estimated by maximum likelihood method. This talk proposes applying this technique to radiation risk model, considered as a statistical method in the research of Life Span Study (LSS). According to the previous study of LSS for non-cancer disease mortality, the estimated dose response model has a complicated structure because baseline (background) rates for proximal survivors are smaller than those for distal survivors during the early follow-up period. This talk includes applying the change-point model for background and dose response, separated by the calendar time, and selecting the change-point of calendar time based on AIC. As a result of this study, the difference of background rates, between proximal and distal survivors, continues to the current years by using change-point model.