

広島統計談話会  
Hiroshima Statistics Study Group

第 315 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ご案内申し上げます。

You are cordially invited to the 315<sup>th</sup> meeting as scheduled below.

日 時 : 2018 年 12 月 21 日 (金) 15:00 –  
Date : December 21, 2018 (Fri) 15:00 –  
場 所 : 放射線影響研究所 講堂  
Place : RERF Auditorium  
演 者 : デール L. プレストン 博士 (米国 ヒロソフト インターナショナル  
コーポレーション 主席研究員)  
Speaker : Dale L. Preston, Ph.D.  
Principal Scientist, HiroSoft International Corporation, USA  
演 題 : 「マヤーク核施設従事者コホートの肺がんリスクにおける放射線の影響 :  
線量の不確実性のためのリスク推定の補正」  
Title : “Radiation effects on lung cancer risks in the Mayak Work Cohort:  
Adjusting risk estimates for dose uncertainty”

要 約 :

**Summary:**

After brief overview of the Mayak worker cohort (MWC) and a description of the current Monte-Carlo-based Mayak Worker dosimetry system (MWDS16), I will describe the newly developed corrected information matrix (CIM) method that can be used with Monte-Carlo dose realizations to adjust risk estimate confidence intervals for the effects of shared dose uncertainties. I will then provide a summary of the results for our current analyses of external (gamma dose) and internal (alpha doses from inhaled plutonium) dose effects on lung cancer risks in the MWC that includes CIM-adjusted adjustment of the radiation effect confidence intervals. The presentation will include with some comments on extensions of the CIM method and extensions of the MWDS to include Monte-Carlo estimates of job-exposure-matrix based estimates of plutonium exposures and doses for workers without plutonium activity measurements.