広島統計談話会
Hiroshima Statistics Study Group

第297回談話会を下記のように開催致しますので
御参加下さいますようご案内申し上げます。

You are cordially invited to the 297th meeting as scheduled below.

日時: 2016年5月13日(金)15:00～
Date: May 13, 2016 (Fri) 15:00～

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

演者: ベンジャミン C. フレンチ (放射線影響研究所統計部副主任研究員)
Speaker: Benjamin C. French, Ph.D.
Associate Senior Scientist
Department of Statistics, RERF

演題: 「生起事象の連続特性に対する時間依存的予測精度」
Title: “Time-dependent prediction accuracy with continuous marks”

要約:
Summary:

Modern statistical methods for quantifying prediction accuracy have developed from the fundamental concepts of sensitivity and specificity of a classifier for a time-independent binary outcome. For time-dependent binary (or, survival) outcomes, analysis approaches have focused on prediction of event occurrences (e.g., readmission to the hospital) and on prediction of cause-specific events (e.g., hospital readmission due to heart failure). For cause-specific events, estimation of prognostic accuracy is achieved by treating the qualitative causes of failure as competing risk events. However, quantitative characteristics of the event (or, ‘marks’) could be incorporated into the assessment of a risk-prediction model. For example, the intensity of resource utilization or cost of admission could be used to create an ordered scale for admission severity. I will define mark-specific prediction accuracy summaries and introduce a non-parametric estimation procedure to determine whether prediction performance varies according to event severity. An application will focus on the performance of a model for hospital readmission among patients with heart failure, for which readmission severity is defined by cost per inpatient day.