Radiation Effects Research Foundation, Department of Statistics

Research Scientist

1. Organization

   The Radiation Effects Research Foundation in Hiroshima and Nagasaki, Japan, is a binational foundation supported by the Japanese and U.S. governments and is recognized throughout the world as a leader in the study of radiation health effects. It studies the health of Japanese atomic-bomb survivors in several large cohorts, including a cohort whose members have participated in biennial health examinations over a period of decades, and conducts fundamental research on the health effects of ionizing radiation and its interactions with genes, lifestyle, and environment. Historically, the Department of Statistics has lead the development of methods for radiation risk estimation including pioneering development of Poisson regression methods and related software, correction for dose uncertainty (i.e., error in the independent variable of the risk regression), specialized sub-cohort sampling designs, and other innovative methods for epidemiology. More recently, the Department has focused on methods for joint analysis of longitudinal and survival data, imputation of missing data, causal inference methods and mediation, and methods for high-dimensional data and genomics. RERF data provide a rich resource and laboratory for the development and application of novel statistical methods. The Department provides statistical support for all epidemiological, laboratory, and clinical research activities at RERF through collaboration with researchers from other departments on study design, data analysis, and reporting. The Department is located in the Hiroshima laboratory, in Hijiyama Park, not far from downtown Hiroshima. Hijiyama Park affords a spectacular view of Hiroshima and splendid cherry blossoms in the spring.

2. Position

   Research Scientist, to focus on statistical consulting and conduct individual and collaborative research. Multiple positions are available. Candidates at all levels (junior and senior) are encouraged to apply.

3. Benefits

   Competitive salary in accord with applicable regulations; research budget provided, but one may also apply for external grants; access to modern computing resources and software; opportunity to work in a collaborative, international, multi-disciplinary setting with statisticians, epidemiologists, clinicians, basic scientists, and geneticists; potential for international collaboration in theoretical and applied research areas; support for travel to international conferences; support for continuing education and training, in collaboration with Japanese and international research institutions (e.g., Hiroshima University, Kurume University, U.S. National Cancer Institute, University of Washington). RERF supports a harmonious work-life balance through set working hours and annual leave.

4. Responsibilities

   Assist in design of research studies and analysis of data in consultation with epidemiologists, laboratory scientists, and clinical researchers studying human health with an emphasis on the long-term effects of radiation exposure and its interaction with genes, lifestyle, and environment. Conduct independent research and collaborate with other researchers in statistical methodology or related areas. Activities include experimental design, data analysis and mathematical modeling, manuscript preparation, and presentation at scientific meetings. Researchers in the Department of Statistics have ample opportunity to pursue their own interests; it is expected that researchers dedicate approximately 2/3 of their time to consulting, with approximately 1/3 of their time available for their own research.

5. Requirements and experience
    a. Strong interest and experience in applied statistics, preferably with an emphasis in biostatistics (e.g., generalized linear models and recent extensions).
    b. A Ph.D. or equivalent experience in biostatistics or mathematical statistics.
    c. Experience in one or more of the following areas: risk estimation / hazard function modeling, analysis of longitudinal data, design and analysis of epidemiologic studies (nested case-control studies, gene-environment interactions), statistical methods for analysis of high-dimensional (e.g., microarray) data.
    d. Good communication skills with some English-speaking ability.
6. Application information: Review of applications will begin April 1, 2018, and continue until the position has been filled. After reviewing the application materials, selected candidates will be contacted for interviews. A complete application consists of:
    a. Personal information (including email address)
    b. Education and work history with publication list
    c. Statement of research interests and goals (1 A4 page)
    d. Reprints of significant publications (up to 5)
    e. Certification of advanced degree (copy of diploma)

    Applicants may be required to submit a medical certificate, documentation attesting to your work history, and recommendation letters for the final selection process.
    Handling of personal information: Application materials will be used for recruitment reviews only. We will not provide the personal information collected from applicants to third parties without reasonable justification.
7. Send application materials to

    Yuriko Ohno
    Personnel Section
    Radiation Effects Research Foundation
    5-2 Hijiyama Park, Minami-ku
    Hiroshima 732-0815 Japan
    Tel: +81-82-261-3131 (Ext. 143)
    e-mail: ohno@rerf.or.jp
8. Further information

    http://www.rerf.or.jp/index_e.html
    http://www.rerf.or.jp/dept/statisi/index_e.html

    Harry M. Cullings
    Chief, Department of Statistics
    Radiation Effects Research Foundation
    5-2 Hijiyama Park, Minami-ku
    Hiroshima 732-0815 Japan
    Tel: +81-82-264-7219 (Ext. 600)
    Fax: +81-82-262-9768
    e-mail: hcull@rerf.or.jp; french@rerf.or.jp