



Kyoto University School of Public Health (KUSPH) invites you to the FY2018 special lecture series on **“The Effects of Medications – how Big Data is Revolutionising Our Understanding”** by Professor Ian Douglas, London School of Hygiene & Tropical Medicine (LSHTM).

As a pharmacoepidemiologist, he has spent several years at the UK Medicines & Healthcare Products Regulatory Agency and in the pharmaceutical industry investigating adverse effects of drugs, both in clinical trials and post-marketing. He is interested, in particular, how we can use large linked electronic healthcare record databases to investigate the effects of drugs, both harmful and beneficial. He is exploring methodologies to minimise some of the biases inherent in the research of drug effects, and his main current areas of interest are case-only approaches to study design and how we can determine whether routine care data can be used to estimate the intended effects of medications.



Professor Ian Douglas

This course will involve a mixture of lectures and discussion groups where participants will get chance to apply their learning to both real and hypothetical research questions in pharmacoepidemiology.

Some sessions will also be delivered by Masao Iwagami, Assistant Professor in the Department of Health Services Research, University of Tsukuba, and Honorary Assistant Professor in the Electronic Health Records Research Group, LSHTM. He is experienced in conducting medical research using large databases of routinely collected data, such as UK Clinical Practice Research Datalink (CPRD), Japanese Diagnosis Procedure Combination (DPC) Database, Tokushukai Medical Database, and Medical Data Vision (MDV) Database.



Assistant Professor
Masao Iwagami

Date	Time	Classroom	Topic of discussion
March 20	13:00 pm- 14:30 pm	All sessions @ Seminar room 335, 3rd floor, G-building, Medical campus	Introduction to Pharmacovigilance, Pharmacoepidemiology and Risk Management An introduction to the disciplines of pharmacovigilance and pharmacoepidemiology. This will explain the origins of the disciplines, how they fit together and how they are useful. We will also discuss how they fit within the international need for formal drug risk management and minimisation.
March 20	14:45 pm- 16:15 pm		Using Big data to investigate the effects of medications This session will discuss electronic health data; in general terms we will think about how they are structured and how we can make use of this to research drug effects. A wide range of practical examples will be cited and some insights to future uses will be explored.
March 22	10:30 am- 12:00 pm		Case study of a medication harm assessment study In this session, Dr. Masao Iwagami (LSHTM and University of Tsukuba) will talk through the steps involved in a published study assessing the potential harm of a medication
March 22	13:00 pm- 14:30 pm		Advanced pharmacoepidemiology methods 1 – Propensity scores The final two sessions will explore advanced statistical methods or study designs frequently used with Electronic Health Records. In the first we will discuss propensity scores – how they are calculated and used to adjust for confounding. Examples from published literature will be presented and we will discover how they compare with more traditional methods to adjust for confounding.
March 22	14:45 pm- 16:15 pm		Advanced pharmacoepidemiology methods 2 – Self-controlled study designs In this second session we will explore self-controlled study designs, specifically the self controlled case series and the case crossover design. The fundamentals of each design and the assumptions that need to be met in order to apply them will be discussed. In exploring the assumptions we will consider a range of published examples.

Walk-ins are welcomed as well, although, we would like to know the number of participants to prepare the handouts

Please register in the link below by March 18th:

<https://goo.gl/forms/1sCxqqkfQxnw4yCP2>



Register here!