THE FACULTY OF HEALTH AND MEDICAL SCIENCES

UNIVERSITY OF SURREY

SURREY WINTER STATISTICS SCHOOL (SWISS)

RESEARCH AND QUALITY IMPROVEMENT USING ROUTINE HEALTHCARE DATA – DIABETES AS AN EXEMPLAR

Venue: University of Surrey
Dates: Monday 15th to Friday 19th January 2018
Prices: **Academic/NHS:** £500 **Commercial:** £800
British Computing Society/CHAIN members £450
Book online: http://store.surrey.ac.uk/

Price includes all lunches, break time teas and coffees, drinks and nibbles with evening lectures as well as course closing dinner. University accommodation, at extra cost, is available dependent on availability.

WHO IS THIS FOR?

Clinicians, researchers and data analysts wanting to work with routine health data

- Clinicians, leaders and managers of health care organisations wanting to improve their use of health data
- Researchers: PhD, potential PhD students or researchers using routine health data
- Public health trainees and specialists
- Data analysts: In health care providers or commissioners - Social scientists and social care students wishing to work with health data

COURSE CONTENTS

We will provide a toolkit for people aiming to provide a higher level of routine healthcare data analysis:

Day 1	• How to define cases using routine data – an introduction to clinical ontologies • An introduction to the (free) statistical package R • Different data types; including parametric and non-parametric data
Day 2	• Clean data and address the issues of miscoding, misclassification, and misdiagnosis using R • How to carry out simple descriptive statistical tests using R • How to conduct hypothesis tests, correlation and linear regression using R
Day 3	• Advanced clinical ontologies • How to conduct hypothesis tests, correlation and linear and logistic regression using R
Day 4	• Advanced data analysis: Survival analysis and Cox regression using R • Privacy, information governance and Caldicott principles
Day 5	• An introduction to health economics

CLINICAL INFORMATICS & HEALTH OUTCOMES RESEARCH GROUP

The course is hosted by the *Clinical Informatics and Health Outcomes Research (clininf.eu)* group and taught by leading informatics academics and practitioners including:

Professor Simon de Lusignan - Professor of Primary Care and Clinical Informatics at the University of Surrey; Medical Director of the RCGP Research and Surveillance centre; practicing GP
Dr Tom Chan – Senior Research Fellow at the University of Surrey
Dr Jeewaka Mendis - Medical Statistician at the Surrey Clinical Research Centre
Dr Uy Hoang - Public Health Research Fellow at the University of Surrey.
Dr Harshana Liyanage, Jeremy van Vlymen and William Hinton - Research Fellows at the University of Surrey
Mr Jake Jordan – Research Fellow in Health Economics at the University of Surrey

FOR MORE INFORMATION PLEASE CONTACT

Jeremy van Vlymen, email: leggettbuildingreception@surrey.ac.uk