## Glasgow Health Data Science Week

## 14th -18th August 2017



All courses will be held in the Jura/Islay computer suites at the Main Library, University of Glasgow.

All courses will be a mix of lectures, tutorials and computer practicals.

Course handbooks with all notes and worked examples for the practicals will be provided.

	Introductory Courses*	Advanced Courses**
Mon 14 <sup>th</sup> – Tue 15 <sup>th</sup> August	<ul> <li>An Introduction to using R with routine data Course Leader: Dr Jon Minton</li> <li>R and RStudio projects, code piping and the tidyverse</li> <li>Reading, tidying, rearranging and writing datasets; working with multiple data types</li> <li>Summarising data with tables and graphs, and automating routine processes with purrr package</li> </ul>	<ul> <li>Multilevel Modelling of Health Data using R</li> <li>Course Leader: Prof. Mark Tranmer</li> <li>Introduce Multilevel Modelling for R users</li> <li>Hands-on use of R packages to fit Multilevel Models</li> <li>Analyse Data and Interpret Results in Health Context</li> </ul>
Wed 16 <sup>th</sup> August	<ul> <li>Information Governance, Disclosure Control &amp; Safe Havens</li> <li>Course Leader: Prof. Colin McCowan</li> <li>Basics of IG with practical focussed on IG Training certificate</li> <li>Disclosure control and preparing outputs</li> <li>Protocols for application to SHs and how to use them</li> </ul>	<ul> <li>Pharmacoepidemiology - Working with</li> <li>Prescribing Information System</li> <li>Course Leader: Dr Richard Papworth / Prof. Colin McCowan</li> <li>Learn basic concepts of pharmacoepidemiology</li> <li>Examine designs through case studies</li> <li>Practical exercises with PIS to identify and measure medication use in individuals</li> </ul>
Thur 17 <sup>th</sup> – Fri 18 <sup>th</sup> August	<ul> <li>An Introduction to Statistics Using R</li> <li>Course Leader: Dr Caroline Haig</li> <li>Learn the principles of basic statistical analyses</li> <li>Learn how to perform these techniques using R and interpret the output</li> <li>Practical exercises to illustrate numerical and graphical techniques</li> </ul>	<ul> <li>Practical exercises to include common data</li> </ul>

<sup>\*</sup> Introductory Courses: No prior knowledge of the subject matter is required for courses running Monday-Wednesday. For students attending the Statistics course on Thursday & Friday we recommend completing An Introduction to using R with routine data as prior learning.

Courses are priced per day as follows:

£125 per day for students, £175 for HEI staff/NHS, £250 for industry.

Booking a full week of courses will offer a 20% discount: Students £500, HEI Staff/NHS £700, Industry £1000

A course drinks reception will be held on Tuesday 15<sup>th</sup> August and a course dinner will be held on Thursday 17<sup>th</sup> August.





Course places are limited so booking is essential.

<sup>\*\*</sup>Advanced Courses: All participants will be expected to have experience of using the R analysis software package, and to have a basic understanding of data management and statistics. The subject matter of specific courses may, however, be new to the participant. Concepts and theory will be introduced for these courses, in the context of using R.