



Statistics and Actuarial Science Seminar

Title: Statistical methods for personalised medicine: Optimising asthma treatment using mobile device data

Speaker: Garrett Greene (University College Dublin)

Date: Thu 20th February 2020 at 2:00PM

Location: Seminar Room SCN 1.25

Abstract: A range of electronic devices are available for monitoring lung function and medication use in asthma patients. These devices generate interlinked datasets which can reveal relationships between medication use and fluctuations in lung function, as well as allowing remote detection and prediction of adverse events such as asthma attacks. We identify a number of statistical parameters of these data which quantify the risk of asthma attacks, and develop a model to optimise the dosage of inhaled medication to minimise risk of attacks for individual patients.