Further information about Professor Dunn's talk

Persecutory delusions (thinking that there is a conspiracy against you, for example) and hallucinations (such as hearing voices) are common psychotic experiences, particularly in, but not restricted to, people diagnosed with schizophrenia. Over the last twenty years Professor Dunn has worked with clinical psychologists (and some psychiatrists) on the development and evaluation of psychological interventions (such as Cognitive Behavioural Therapy for Psychosis) to help reduce the strength of these experiences and reduce the distress that they cause. More recently the work has focussed on more specific interventions targeting specific psychological mechanisms assumed to be important causes of particular symptoms (cognitive biases leading to persecutory delusions, for example).

One of the key aspects of this work is using randomised clinical trials to evaluate *both* efficacy of the intervention (*Does it work?*) and whether the intervention works via changes in the specific target(s) of the intervention (*How does it work?*). The main methodological challenge is convincingly to demonstrating the latter.

Professor Dunn will briefly describe the work of the Psychosis Research Partnership (PRP) and a complementary programme of methodological (i.e. statistical) research motivated by the needs of PRP and similar clinical research groups.

He will then describe in more detail research led by Daniel Freeman (a member of PRP) on the use of Virtual Reality (VR) in the study and treatment of paranoid delusions. This research demonstrates that paranoid thoughts are not restricted to people suffering from diagnosed mental illness, let alone schizophrenia, and that VR can be used experimentally to manipulate levels of paranoia and to provide a platform for therapies to help reduce the severity of, and distress caused by, clinically-significant paranoia.

Finally, Professor Dunn will return to the research on statistical methodology motivated by the above clinical research collaborations. He will illustrate statistical issues by reference to a recently completed clinical trial (the Worry Intervention Trial – WiT), led by Daniel Freeman and funded by the MRC/NIHR Efficacy and Mechanisms Evaluation (EME) Programme.

After gaining qualifications in natural sciences and biochemistry (PhD), and gaining experience in microbiology, Graham Dunn abandoned laboratory work and retrained as an applied statistician. He then worked at the Institute of Psychiatry for the next 17 years, at first in the General Practice Research Unit and then in the Institute's Biometrics Unit (later the Department of Biostatistics and Computing). He was appointed as Professor of Biomedical Statistics at the University of Manchester at the end of 1996. Graham's current research is primarily focussed on the design and analysis of randomised trials of complex interventions (Efficacy and Mechanisms Evaluation), specialising on the evaluation of cognitive behavioural, and other psychological, approaches to the treatment of psychosis, depression and other mental health problems.