

## Case study

### Generation Scotland overcomes recruitment challenge with Oragene®•DNA

Lee Murphy

Wellcome Trust Clinical Research Facility, Western General Hospital, Edinburgh, Scotland

#### Study overview

Generation Scotland is creating an ethically sound, family and population-based resource to identify the genetic basis of common complex diseases ([www.generationscotland.org](http://www.generationscotland.org)). The Generation Scotland Scottish Family Health Study is a large-scale, long-term project, which aims to find out more about common illnesses, such as heart disease and stroke. It is known that heredity plays a role in these diseases. By collecting medical and genetic information from families, and by following their health over the coming years, Generation Scotland hopes to find out which lifestyle and inherited factors are connected with higher or lower risk of these illnesses.



Launched in February 2006, Generation Scotland is a partnership between the Scottish people, the NHS in Scotland and the four Scottish University Medical Schools (Aberdeen, Dundee, Edinburgh and Glasgow). Participants attend clinics where they undergo a battery of phenotyping tests and provide biological samples (blood, plasma, urine) for biochemical analysis and future research use. There is also the opportunity to enhance the phenotype through NHS medical record linkage, which is designed to create a research platform for emerging technologies to link health information and genetic research. Generation Scotland provides managed access to this valuable resource to clinical researchers for downstream genomic, biomarker and drug target discovery projects.

#### Main challenges

The Generation Scotland Scottish Family Health Study aims to collect phenotype information and blood for biochemical analysis and DNA isolation from 25,000 people living in Scotland. As the name suggests, the Scottish Family Health Study is based on families, so they need at least one sibling and preferably other family members (aged 18 or over) as well. The inclusion of as many family members as possible, especially from large families, will increase the power of the study. However, for a variety of reasons, not all participants can make a clinic appointment.

