Culturing of Fibroblasts, Chorionic Villi and Amniocytes for DNA extraction and forwarding live cultures to other laboratories.

Contact details
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Samples required
- Fresh viable tissue samples such as:
  - 2-5ml amniotic fluid
  - 2-5mg chorionic villi (after cleaning)
  - Skin biopsies should include dermal tissue
  - Pregnancy loss tissue – due to the nature of this material we can attempt to culture cells, however – please note that the failure rate is considerably higher than prenatal or skin biopsy samples.
- It is advisable to contact the laboratory prior to sending a sample.

Patient details
Referrals must be made by specialist consultants.

- Pregnant women with a family history of a known genetic/metabolic/biochemical problem referred by a specialist consultant
- Children with a suspected (or known) genetic/metabolic/biochemical condition referred by a specialist consultant
- Pregnancy loss material requiring specialist genetic/metabolic/biochemical testing using live cells (specialist consultant referrals)
- Forensic material where DNA and cell storage are required.

Service offered
Extraction and storage of DNA from uncultured and cultured fibroblasts, chorionic villi and amniocytes.
Forwarding of fibroblast cultures for specialist genetic/metabolic/biochemical testing.

Please note that the Regional Genetics Service always attempts to use/recommend accredited laboratories where possible. The Regional Genetics Service accepts no responsibility for results obtained from any other laboratory.

Technical
Culturing of fibroblasts, chorionic villi and amniocytes is performed in the North East Thames Regional Genetics laboratories using fully trained staff and aseptic techniques. Cultures are established by using a synthetic culture media which provides consistency between media aliquots. Cultures are incubated in a 5% carbon dioxide atmosphere which mimics the lower oxygen environment that exists naturally for these types of cells.

Once established, cells can be passaged (divided) to provide extra material if required. Please note, there is a limit to the number of passages possible before cells begin to senesce, and there is a small but increased risk of introducing cultural artefact from prolonged growth of cells.

Target reporting time
Not applicable – cultures will be dealt with as soon as they have grown (usually within 14 days unless other tests are prioritised).

Notification of samples that are failing to grow should be received 10 days after receipt at the laboratory and failed reports issued at approximately 14 days post receipt.

Please contact the laboratory to discuss complex cases.