# National Commissioning Group (NCG) For Highly Specialised Services UCLH QUEEN SQUARE NCG CLINICAL AND DIAGNOSTIC SERVICE FOR RARE MITOCHONDRIAL DISEASES IN ADULTS AND CHILDREN Genetic analysis request form

## **Patient & Contact Details**

Patient Name:	
DoB:	NHS No:
Address:	
	Post Code:
Patient ethnicity:	Sex: M/F
Referring Hospital:	Hosp. No:
Referring Consultant:	Specialty:
Other Consultants:	Specialty:
Address for correspondence:	
Tel:	E-mail (preferably nhs.net

#### Consent for genetic analysis

It is the referring clinician's responsibility to ensure that the patient/carer knows the purpose of the test and that the sample may be stored for future testing related to specific diagnosis for the patient. In signing this form the clinician confirms that they have obtained consent for testing and storage. The patient should be advised that the sample may be used anonymously for quality assurance, research and training purposes. Please advise us of any restrictions. This laboratory follows the recommendations laid down by the Joint Committee on Medical Genetics guidance document "Consent and Confidentiality in Genetic Practice September 2011".

# Sample details

•				
Sample Type(s)	and Date:			
Please see samp	ole requirement	information on	page 2	
Blood	Buccal	Urine*	Muscle (specify)	Fibroblasts
Other (specify)				
If the sample is	muscle, please	state if it has be	en obtained from:	
Open biopsy	Needle	biopsy	Post-mortem	Endomyocardial biopsy
<b>Clinical Details</b>				
This is:	Proband	Affecte	d relative	Unaffected relative
If affected: Age	at onset:			
Family history o	f: Parenta	al consanguinity	Maternal inher	itance
Local report on	muscle biopsy:			
Clinical Investig	ations			
Bl. Lactate	mmol/l	CSF Lac	tate mmol/l	Serum CKiu
ECG abnormal Y	/N EEG abi	normal Y/N	Echo abnormal Y/N	
Brain MRI/CT fir	ndings:			
	-			

#### Classical Clinical Phenotype? Y/N

If yes, then which of the following?

Pearson's	LIMM	NARP/MILS
syndrome		
KSS	MNGIE	LHON
CPEO	MIDD	Deaf/Dystonia
CPEO (+)	SNHL	Leigh syndrome
MELAS	HCM	Alpers' syndrome
MERRF	Pure Myopathy	

### If no, then which of the following clinical features are present?

Stroke/S-L	Dev Delay	Deafness
Episodes		
Encephalopathy	Hypotonia	Anaemia
Seizures	Dystonia	Renal dis
Migraine	Central apnoea	Optic atrophy
Diabetes	Dysphagia	Retinopathy
Endocrinopathy	Constipation	Nystagmus
Growth failure	Liver disease	Fatigue
Cardiomyopathy	Myopathy	Dementia
Failure to thrive	Myalgia	Learning Diff

Further clinical details:

# Molecular Genetic Investigations:

R42 LHON

R64 MELAS or MIDD - m.3243A>G

R299 mtDNA rearrangement (long range PCR)

R301 mtDNA depletion (real-time PCR)

R350 MERRF common pathogenic variants

R351 NARP or maternally inherited Leigh syndrome

R397 Maternally inherited cardiomyopathy - m.4300A>G

NGS:

R63 Possible mitochondrial disorder – nuclear genes

R300 mtDNA full genome sequencing (NGS)

R352 Mitochondrial DNA maintenance disorder

Familial Testing:

R240 Diagnostic testing for known pathogenic variant (specify) .....

R242 Predictive testing for known familial variant (specify) .....

R244 Carrier testing for known familial variant (specify) .....

R246 Carrier testing at population risk for partners of known carriers of autosomal recessive disorders (specify

gene) .....

R375 Family follow up testing to aid variant interpretation .....

Other .....

#### SAMPLE REQUIREMENTS

The standard samples sent for analysis are fresh blood in EDTA (ideally 2x6ml), frozen muscle or extracted DNA. If sending DNA extracted by another laboratory, please indicate the original sample type. \*Urine should be ~50mls early morning sample and should arrive in lab within 48hrs Other tissues may be accepted after discussion with the laboratory.

#### Address to:

North Thames GLH, Rare & Inherited Disease Genomic Laboratory Specimen Reception, Level 5 Barclay House, 37 Queen Square, London WC1N 3BH

Opening hours: Monday to Friday 9.00am to 5.30pm (please ensure samples arrive by 5pm)