

Motor  
Learning  
Laboratory

# Gait analysis

at the **RNOH**



# Gait analysis at RNOH

With over 10 years' experience, the Royal National Orthopaedic Hospital (RNOH) offers an expert gait analysis service. We are now introducing a new, state-of-the-art Motek GRAIL system to revolutionise the way we undertake gait assessment.

## Who are we?

The Motor Learning Laboratory (MLL) at RNOH offers an excellent gait analysis service to clinicians for pre-operative planning, pre and post-operative outcome evaluation and state-of-the-art rehabilitation. The MLL is perfectly positioned to support a wide variety of clinical research trials.

## What can we offer?

With the new state-of-the-art Motek GRAIL system and an expert team we can provide:

- Personal, professional and efficient gait analysis services
- Analysis of normal, steady state walking in a treadmill-based, virtual environment
- Ground reaction forces measured at every stride
- A 10 camera motion capture system monitors all available kinematics
- Provision of kinematic scores, power production and step analysis
- Bespoke gait analysis and measurements tailored to your specific research questions
- Access to our ever-increasing gait database for analysis and comparison



## Our services

This new improved technology builds on our experience to develop key services:

- Enhanced, rapid and detailed gait assessment providing in-depth analysis to inform complex surgical and conservative patient management
- Bespoke and objective assessment of clinically relevant gait outcomes compared against a 'normal' database to answer all your clinical and research questions
- Safe and high quality functional gait rehabilitation via a 2m long treadmill immersed in a virtual environment through a floor to ceiling 180° cinema style screen, recreating 'real-life' walking
- Guidance and support with gait based research projects and design



## Contacting us

To learn more about the services of the RNOH Motor Learning Laboratory, arrange a visit or discuss how the MLL could support your clinical service and research developments, please contact us.

### **Rachel Dalton**

Head of Therapies  
(Clinical Director) RNOH

### **Telephone:**

0208 385 3028

### **Email:**

rachel.dalton@rnoh.nhs.uk

### **Website:**

[www.rhon.nhs.uk/clinical-services/rehabilitation-and-therapy/motor-learning-laboratory](http://www.rhon.nhs.uk/clinical-services/rehabilitation-and-therapy/motor-learning-laboratory)

**"I wish I could have come here every day. I feel like I have improved lots since last time"**

MDS

25.06.2014

If you have any comments about this leaflet or would like it translated into another language/large print, please contact the Clinical Governance Department on 020 8909 5439/5717.

Royal National Orthopaedic Hospital NHS Trust  
Brockley Hill  
Stanmore  
Middlesex  
HA7 4LP

Switchboard: 020 8954 2300

[www.rnoh.nhs.uk](http://www.rnoh.nhs.uk)

Twitter: @RNOHnhs

14-109 © RNOH

Date of last review: July 2014

Date of next review: July 2016



**“Outstanding.  
Much better than  
the other labs  
we’ve visited”**

Mother of patient,  
18/06/2014