UCL APPLIED RENAL PHYSIOLOGY 2014

A modular course for clinicians and scientists

20-23 May 2014

Sir William Wells Atrium, Royal Free Hospital, London NW3

DAY ONE

Primer in renal physiology

Renal microcirculation

Glomerular function

Proximal tubular function

Assessing renal function

Erythropoietin

Calcium homeostasis

Applied physiology: hypovolaemia, hypertension, and renal injury

Questions for MRCNeph

This one-day module features a comprehensive overview of renal physiology for clinicians, particularly nephrologists.

It will also provide a thorough introduction for researchers entering the renal field.

DAY TWO

Part 1
Fluids, electrolytes and acid-base

Acid-base disorders

Disorders of sodium and water metabolism

Specialised workshops for nephrologists, acute physicians and intensivists

Debate: Stewart versus classical acid-base theory

DAY THREE

Part 2
Fluids, electrolytes and acid-base

Disorders of potassium, calcium, magnesium and phosphate

Diuretics

Fluid therapy

Specialised case workshops for nephrologists, acute physicians, and intensivists

This two-day module provides a comprehensive overview of fluids, electrolytes and acid-base for clinicians and will cover background physiology and clinical scenarios. Each day will feature small group interactive workshops.

These two days will particularly benefit those practising in nephrology, critical care or any acute medical specialities.

DAY FOUR

Frontiers in renal physiology

This one-day conference will present current concepts and research developments in renal physiology.

The faculty comprises internationally renowned experts in the field.

A highlight of this day will be the inaugural Oliver Wrong Lecture given by Professor Giuseppe Remuzzi.

Plus presentation of The Oliver Wrong Prize for Outstanding Contribution to Renal Physiology by a Junior Researcher.

CPD credit from the Royal College of Physicians of London to be confirmed

COURSE DIRECTORS: Robert Unwin, Chris Laing, Ben Walsh

Please register at UCL Online Store

http://www.onlinestore.ucl.ac.uk

For further information, please contact the Course Administrator

Pamela Fong Whitehead, UCL Centre for Nephrology, Nephrology, Floor 1, UCL Medical School, Rowland Hill Street, London NW2 2PF

pf.whitehead@ucl.ac.uk / +44 (0)20 7830 2930

UCL CENTRE FOR NEPHROLOGY ROYALFREE

Royal Free London NHS Foundation Trust

Venue and travel

The Sir William Wells Atrium is a modern conference hall in the Royal Free Hospital, located in Hampstead in northwest London.

Underground: The Northern Line on the London Underground (Belsize Park station)
Rail: The London Overground (Hampstead Heath station)
Road: Delegates are advised not to drive their own cars to the Royal Free. Parking is by residential permit or pay & display only
Bus: Numbers 24, 46, 168, 268, C11

REGISTRATION

The registration fee includes lunches and coffee/tea break refreshments

Delegates may register to attend any number or combination of modules

one day	£150.00
two days	£250.00
three days	£350.00
four days	£400.00

Payment

Payment by debit or credit card

Please register at UCL Online Store

http://www.onlinestore.ucl.ac.uk

Confirmation

Confirmation of registration and course information will be sent to delegates in **April**

Cancellation

Please see Terms & Conditions, UCL Online Store

For further information, please contact the Course Administrator

Pamela Fong Whitehead

UCL Centre for Nephrology, Nephrology, Floor 1, UCL Medical School, Rowland Hill Street, London NW2 2PF

pf.whitehead@ucl.ac.uk / +44 (0)20 7830 2930

Registration closing date 25 April 2014

ACCOMMODATION

Rooms have been reserved at preferential rates at two hotels in Hampstead, within walking distance. Rates include VAT and service charge.

	Premier Inn Hampstead 215 Haverstock Hill, London NW3 4RB Tel 020 7443 7500 Email: londonhampstead.PTI@whitbread.com **website:** **http://www.premierinn.com/en/hotel/LONHMP/london-hampstead** **5 minutes walking distance**	**Quality Hotel Hampstead** 5 Frognal, London NW3 3AL Tel 020 7794 0101 Email: info@qualityhampstead.com **website:** **www.qualityhampstead.com** **20 minutes walking distance**
single	for Royal Free rate, please contact Marilyn Ramtohul	£99.00
double		£109.00
twin		£109.00
breakfast	£8.95 per person	choice of full English breakfast or Continental breakfast
parking	£14.00 per day	no charge
WiFi	first 30 minutes free	no charge
cancellation policy	before 1300hr day of arrival	72 hours prior to day of arrival

To obtain the Royal Free rate, please quote:
Royal Free Hospital / Renal Physiology 2014 / Pamela Whitehead

You may wish to check the Premier Inn's online rates and compare to the Royal Free rate.

Please make your reservation direct with the hotel of your choice
Please book as soon as possible as rooms are subject to availability

Cancellation

Cancellations must be made direct to the hotel. Please check terms and conditions with each hotel.

DOCTOR in the HOUSE, Accommodation Agency

Accommodation in London for medical and all other professions
Tel 020 8870 5949
Email: **doctorinthehouse1@gmail.com**
www.doctorhouse.co.uk

- Offering B&Bs, self-contained flats, short-term rates
- In all areas of London close to public transport

RATES FOR 2014
Bed and Continental Breakfast

SINGLE		DOUBLE/TWIN	
nights	per night	nights	per night
1–5	£58	1–5	£85
6–7	£53	6–14	£80
8–10	£47		
11–14	£43		
15–19	£40		

Please contact Doctor in the House direct for information and booking

Venue: Tutorial Room 11, UCL Medical School, ground floor

Tuesday 20 May PRIMER IN RENAL PHYSIOLOGY

0845-0930	**REGISTRATION**	
0930-1000	A nephron overview	Matt Bailey
1000-1030	The renal microcirculation	Chris Lote
1030-1100	Glomerular function	Andy Salmon
1100-1130	coffee break	
1130-1200	Proximal tubular function	Andrew Hall
1200-1230	Distal tubular function	Robert Unwin
1230-1250	Assessing glomerular function	Andy Salmon
1250-1310	Assessing tubular function	Ben Walsh
1310-1400	lunch break	
1400-1430	Erythropoietin	Iain Macdougall
1430-1500	The kidney and calcium	John Cunningham
1500-1630	Renal physiology for MRCNeph	Shabbir Moochhala
1630-1700	tea break	
1700-1745	APPLIED RENAL PHYSIOLOGY LECTURE SERIES: THE KIDNEY IN HEALTH AND DISEASE The kidney in salt handling, blood volume and blood pressure	Peter Aronson

Venue: Sir William Wells Atrium, Royal Free Hospital, ground floor

Wednesday 21 May PART 1: FLUIDS, ELECTROLYTES AND ACID-BASE

0845-0930	**REGISTRATION**	
0930-1000	Acid-base physiology	Steve Walter
1000-1040	Metabolic acidosis and alkalosis	Walter Boron
1040-1100	Respiratory acidosis and alkalosis	tbc
1100-1130	coffee break	
1130-1300	Acid-base workshop 1 Acid-base workshop 2	Chris Laing Ben Walsh
1300-1400	Buffet lunch	
1400-1445	Hyponatraemia	Ewout Hoorn
1445-1515	Hypernatraemia	Robert Zietse
1515-1530	tea break	
1530-1700	Small group case workshops: hyponatraemia & hypernatraemia Ewout Hoorn, Chris Laing, Ben Walsh, Robert Zietse	
1700-1800	**DEBATE** The Stewart method of acid-base clinical assessment is superior to classical acid-base theory in clinical practice	

Venue: Sir William Wells Atrium, Royal Free Hospital, ground floor

Thursday 22 May PART 2: FLUIDS, ELECTROLYTES AND ACID-BASE

0845-0930	**REGISTRATION**	
0930-1000	Hypokalaemia	Detlef Böckenhauer
1000-1030	Hyperkalaemia	Kevin O'Shaughnessy
1030-1100	Magnesium in health and disease	Pascal Houillier
1100-1130	coffee break	
1130-1200	Hypocalcaemia and hypercalcaemia	John Cunningham
1200-1230	Phosphate disorders	Andrew Hall
1230-1300	Replacement and maintenance fluids	Andrew Lewington
1300-1400	buffet lunch	
1400-1530	Small group case workshops: calcium, phosphate, magnesium, potassium Detlef Böckenhauer, Andrew Hall, Felix Knauf, Chris Laing, Ben Walsh	
1530-1600	Diuretics	Chris Wilcox
1600-1630	tea break	
1600-1730	**NEPHROLOGY** small group workshops	
	Tubular disease workshop	Robert Kleta
	Fluid and electrolyte problems in dialysis	Charles Chazot
	CRITICAL CARE small group workshops	
	Electrolyte problems in critical care	Neil MaCallum
	Fluid therapy in critical care: what is the evidence?	John Prowle
	ACUTE MEDICAL SPECIALITIES small group workshops	
	Fluid, electrolyte and acid-base problems on medical take 1	Chris Laing
	Fluid, electrolyte and acid-base problems on medical take 2	Ben Walsh

Venue: Sir William Wells Atrium, Royal Free Hospital, ground floor

Friday 23 May FRONTIERS IN RENAL PHYSIOLOGY

0830-0900	**REGISTRATION**	
0900-0940	The DCT: a short nephron segment for a big job	David Ellison
0940-1020	Bicarbonate transport in the distal nephron: recent insights acid/base balance and hypertension	Dominique Eladari
1020-1100	Calcium and magnesium handling	Pascal Houillier
1100-1115	coffee break	
1115-1155	The proton pump: the collecting duct and the inner ear	Fiona Karet
1155-1235	Oxalate, inflammation and renal failure	Peter Aronson
1235-1315	Potassium regulation: directions forward	Gerhard Giebisch
1315-1400	lunch break	
1400-1440	Genetic insights into the pathophysiology of Fanconi syndrome	Robert Kleta
1440-1520	Gas channels in the nephron: how and why	Walter Boron
1520-1600	EAST syndrome: a new disease gaining maturity	Detlef Bockenhauer
1600-1615	tea break	
1615-1655	ATP, the kidney and the inflammasome	Robert Unwin
1655-1735	Sympathetic activity, ion transport and hypertension	Gerald Di Bona
1735-1830	**OLIVER WRONG Lecture**	**Giuseppe Remuzzi**

INVITED FACULTY

Peter Aronson	Yale University, USA
Matthew Bailey	University of Edinburgh, UK
Detlef Böckenhauer	Great Ormond Street Hospital and Institute of Child Health/UCL, London
Walter Boron	Yale University, Meyers/Scarpa Chair
Charles Chazot	Nephrocare Tassin-Charcot, France
John Cunningham	Royal Free London NHS Foundation Trust and UCL
Gerald DiBona	Professor Emeritus of Medicine and Molecular Physiology and Biophysics, Iowa USA
Dominique Eladari	Hôpital Européen Georges Pompidou, Paris
David Ellison	Oregon Health & Science University, USA
Lui Forni	Worthing Hospital, UK
Gerhard Giebisch	Yale University, USA
Andrew Hall	Universität Zürich, Switzerland and UCL, London
Ewout J Hoorn	Erasmus Medical Center, Rotterdam, The Netherlands
Pascal Houillier	Hôpital Européen Georges Pompidou and Université René Descartes, Paris
Philippe Jaeger	UCL, London
Fiona Karet	Cambridge Institute for Medical Research, UK
Robert Kleta	UCL, London
Felix Knauf	Yale University, USA
Andrew Lewington	Leeds Teaching Hospitals NHS Trust
Christopher Lote	University of Birmingham, UK
Neil MaCallum	University College Hospital, London
Iain Macdougall	King's College Hospital, London
Shabbir Moochhala	Royal Free London NHS Foundation Trust and UCL
Kevin O'Shaughnessy	Cambridge University Hospitals NHS Foundation Trust, University of Cambridge, UK
John Prowle	The Royal London Hospital, UK
Giuseppe Remuzzi	Mario Negri Institute, Italy
Andy Salmon	University of Bristol, UK
Steve Walter	Emeritus, Imperial College London
Christopher Wilcox	Georgetown University, USA
Robert Zietse	Erasmus Medical Center, Rotterdam, The Netherlands

COURSE DIRECTORS

Chris Laing	Royal Free London NHS Foundation Trust and UCL, London
Robert J Unwin	UCL, London, and Royal Free NHS Foundation Trust
Ben Walsh	UCL, London, and Royal Free NHS Foundation Trust

Accreditation

CPD credit to be confirmed by the Royal College of Physicians of London

Certificate of Attendance

A Certificate of Attendance will be available to all registered delegates at the conclusion of the course

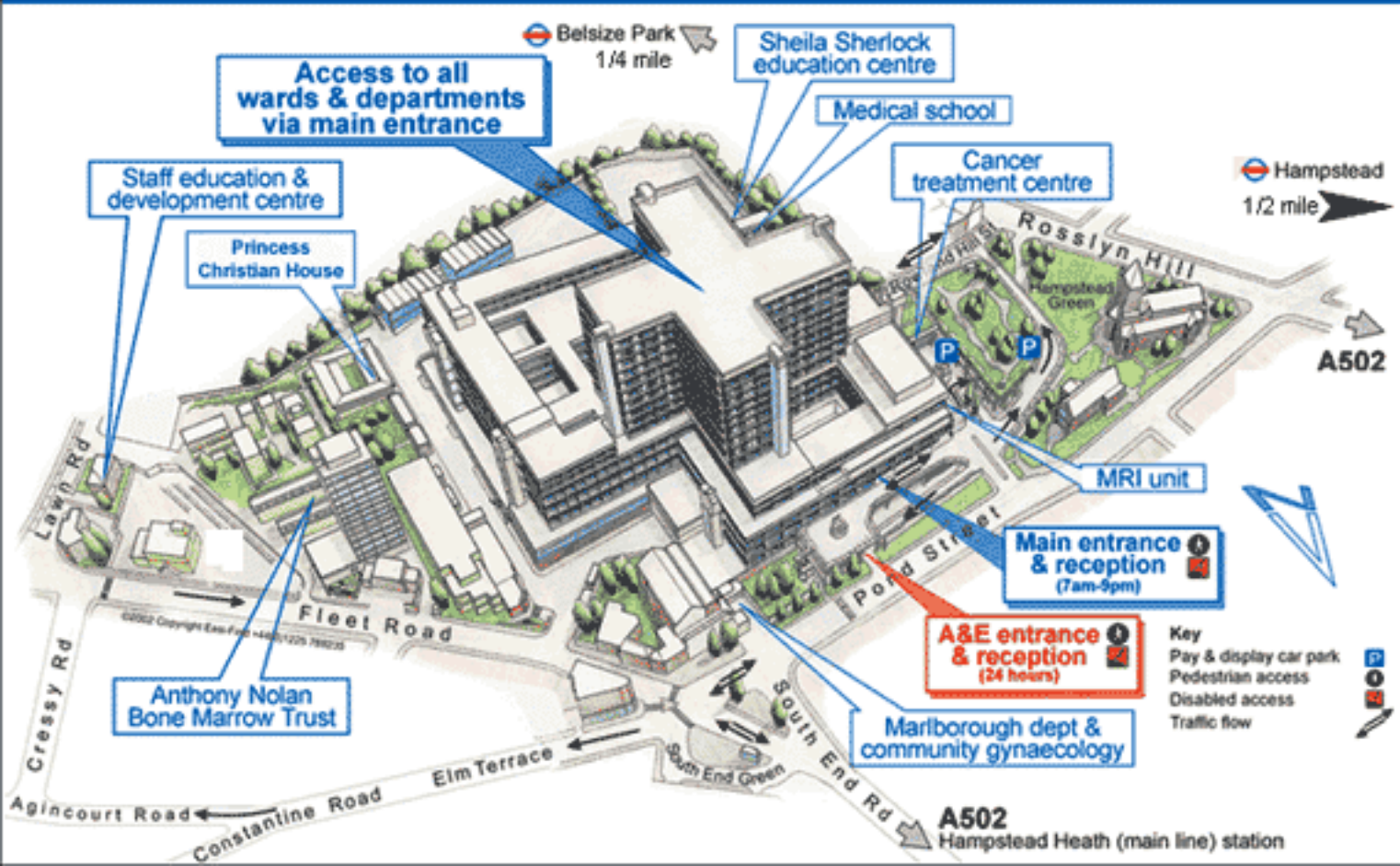
Course Administration

Pamela Fong Whitehead
UCL Centre for Nephrology Royal Free
UCL Medical School
Nephrology, Floor 1
Rowland Hill Street
London NW3 2PF
Tel +44 (0)20 7830 2930
EMAIL:pf.whitehead@ucl.ac.uk

Disclaimer
All best endeavours will be made to present the programme as printed. However, the Course Administration reserves the right to alter or cancel, without prior notice, any arrangements, timetables, plans or other items relating directly or indirectly to the Course, for any cause beyond its reasonable control. In the event the Course is cancelled by the organisers, or cannot take place for any reason outside of the control of the organisers, the registration fee shall be refunded in full. The liability of the organiser shall be limited to that refund and the organisers shall not be liable for any other loss, cost, or expense, howsoever caused, incurred or arising.

Royal Free Hampstead NHS Trust

The Royal Free Hospital



UCL APPLIED RENAL PHYSIOLOGY 2014

DAY 1: PRIMER IN RENAL PHYSIOLOGY
Tuesday 20 May
Royal Free Hospital

Venue: Tutorial Room 11, ground floor

Arrive at Royal Free Hospital and UCL Medical School, Rowland Hill Street entrance (NW3 2PF)

Go to the Medical School administration corridor on the ground floor (adjacent to the Haemophilia Centre). From Rowland Hill Street entrance, it is straight ahead of you and to the right of the lifts and white staircase.

Proceed down this corridor and take the second corridor to the left. There is a cluster of Tutorial Rooms 11, 12, and 13.

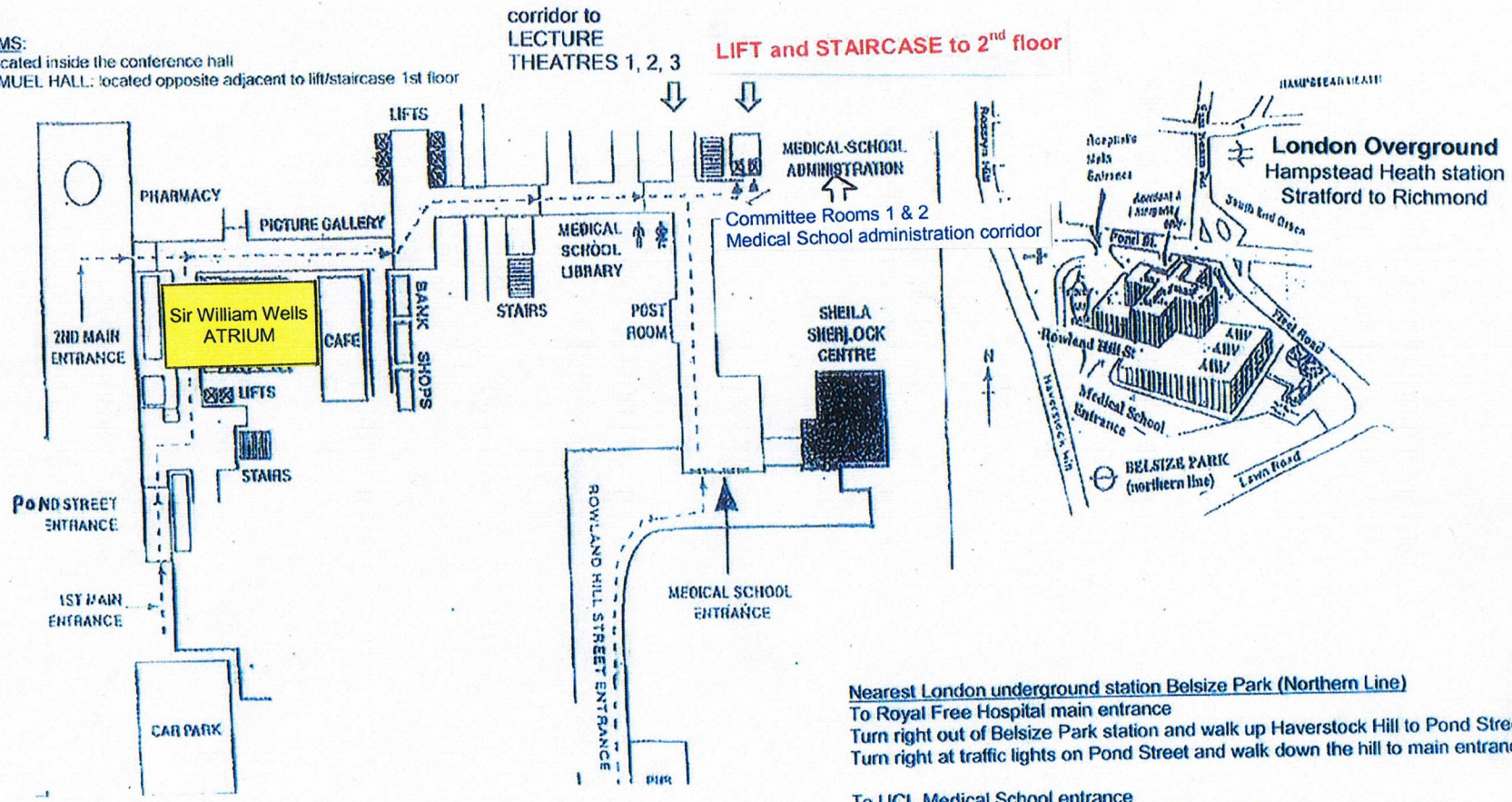
The course, including breaks and lunch, will be held in Tutorial Room 11.

Royal Free Hospital and UCL Medical School ground floor

UCL Medical School
Royal Free campus
Rowland Hill Street
London NW3 2PF

Royal Free London NHS Foundation Trust
Pond Street, London NW3 2QG

RESTROOMS:
ATRIUM: located inside the conference hall
PETER SAMUEL HALL: located opposite adjacent to lift/staircase 1st floor

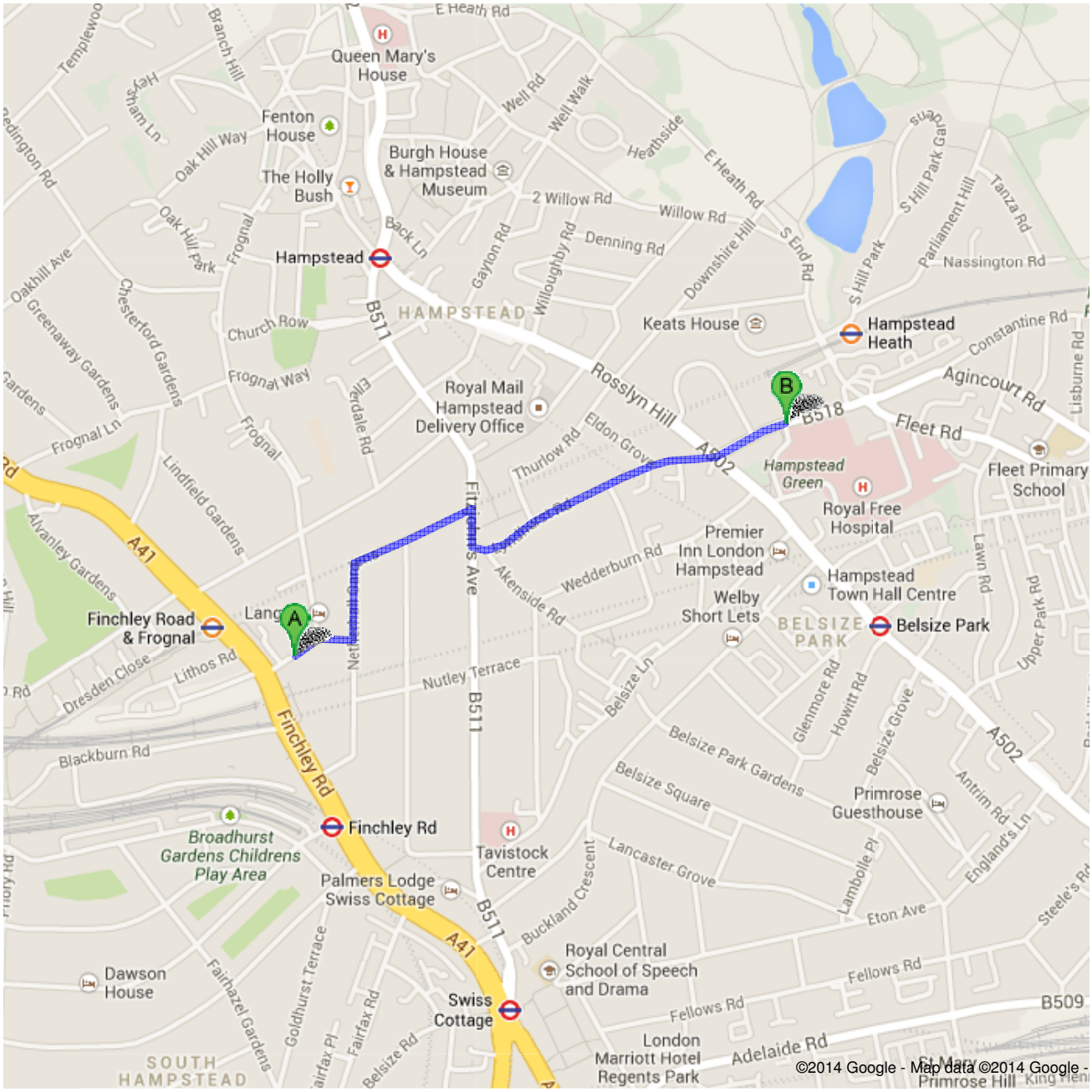


Nearest London underground station Belsize Park (Northern Line)
To Royal Free Hospital main entrance
Turn right out of Belsize Park station and walk up Haverstock Hill to Pond Street
Turn right at traffic lights on Pond Street and walk down the hill to main entrance of hospital

To UCL Medical School entrance
Walk up Haverstock Hill to Rowland Hill Street (George pub on corner)
Turn right and walk down Rowland Hill Street to Medical School entrance at bottom of hill

Directions to Royal Free Hospital
Pond St, London NW3 2QG, United Kingdom
0.8 mi – about **16 mins**

Walking directions are in beta.
Use caution – This route may be missing sidewalks or pedestrian paths.



Quality Hotel Hampstead
5 Frognal, London, EN NW3 6AL, United Kingdom

	1. Head **northeast** on **Frognal** About 58 secs	go 180 ft total 180 ft
	2. Slight right onto **Netherhall Way** About 1 min	go 223 ft total 404 ft
	3. Turn left onto **Netherhall Gardens** About 6 mins	go 0.2 mi total 0.3 mi
	4. Turn right onto **Fitzjohn's Ave/B511**	go 236 ft total 0.4 mi
	5. Turn left onto **Lyndhurst Rd** About 6 mins	go 0.3 mi total 0.7 mi
	6. Continue onto **Pond St/B518** Destination will be on the right About 2 mins	go 489 ft total 0.8 mi

Royal Free Hospital
Pond St, London NW3 2QG, United Kingdom

These directions are for planning purposes only. You may find that construction projects, traffic, weather, or other events may cause conditions to differ from the map results, and you should plan your route accordingly. You must obey all signs or notices regarding your route.

Directions weren't right? Please find your route on maps.google.com and click "Report a problem" at the bottom left.

Premier Inn Hampstead

215 Haverstock Hill, Hampstead, London NW3 4RB

T: 0871 527 8662

F: 0871 527 8663

Located close to Hampstead Heath and Kenwood House. Ideally situated for a wide variety of restaurants, with bars and boutique stores close by. Within easy reach of M1 and Belsize Park tube station with central London just 15 minutes away by tube.

Our London Hampstead Premier Inn has everything you'd expect, incredibly comfy beds in every room and an onsite restaurant.

BRASSERIE CHEZ GERARD

Directions:

Exit M1 onto the North Circular A406 eastbound, exit and join the A41 Hendon Way southbound. Turn left onto Arkwright Road and then turn right onto Fitzjohn's Avenue and left at the bottom onto Belsize Lane, which leads onto Ornan Road. The hotel is on the right at the top of the road.

Transport and local information:

Arsenal FC 2 miles

London Eye 3 Miles

Tower of London 3 miles

Hampstead Heath Train Station 0.5 mile

Belsize Park Tube Station 0.25 mile

Wembley Stadium 8 miles