



# Applied Renal Physiology 2020

## A modular course for clinicians and scientists

29 April – 1<sup>st</sup> May 2020

The Atrium, Royal Free Hospital, Hampstead, London, NW3 2QG, UK

This unique 3-day course integrates understanding of renal physiology and electrolyte and acid-base disorders that many find confusing.

It features lectures from international physiology and nephrology experts, small group case discussions and workshops in order to ground participants in the pathophysiology and clinical management of electrolyte and acid-base disorders, hypertension and fluid management.

### Who this course is for

The course is aimed at trainees in renal medicine, but will also be of interest to other healthcare professionals involved in the management of patients with chronic renal failure.

### Accreditation

CPD credit to be confirmed by the Royal College of Physicians, United Kingdom. In previous years the course has been awarded 18 category 1 (external) CPD credits, and we expect the 2020 course to be awarded the same.

### Registration/Fees

Category	1 day	2 days	3 days
Trainee grades:	£200	£300	£400
Consultant:	£290	£380	£410
RF/UCL Staff	£110	£220	£320

### Course Admin

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The course is run over 3 days but attendance can also be on individual days. The registration fee includes lunch and refreshments during the breaks. Booking and payment is via [UCL Online](https://www.ucl.ac.uk/nephrology/applied-renal-physiology-course) store with a debit/credit card.

Webpage: <https://www.ucl.ac.uk/nephrology/applied-renal-physiology-course>

# Applied Renal Physiology - Course programme

**Wednesday, 29<sup>th</sup> April 2020**

## **Module 1 Primer in renal physiology**

Nephron overview

- Glomerular function
- Proximal tubular function
- Water handling in the nephron
- Distal tubular function
- Renal tubular acidosis

## **Module 2 Applied renal physiology**

- Topics tbc

Module 1 is intended to act as a refresher in the basics of renal physiology for those whose memories from medical school are too hazy. Module 2 in the afternoon provides an update in applied renal physiology.

**Thursday, 30<sup>th</sup> April 2020**

## **Module 3 Fluids, electrolytes and acid-base (Part 1)**

- Acid-base physiology
- Metabolic acidosis and alkalosis
- Acid-base small group case Workshops
- Hypophosphataemia
- Hyponatraemia
- Hypernatraemia
- Sodium small group case workshops

**Friday, 1<sup>st</sup> May 2020**

## **Module 3 Fluids, electrolytes and acid-base (Part 2)**

- Hypokalaemia
- Hyperkalaemia
- Magnesium disorders
- Calcium homeostasis & the kidney
- PO<sub>4</sub>Mg/K/Ca small group case workshops
- IV Fluid therapy
- Diuretics
- MCQs in Renal Physiology

This two-day module provides a comprehensive overview of fluids, electrolytes and Acid-base for clinicians and will cover background physiology and clinical sciences. Each day will feature small group interactive workshops. These two days will particularly benefit those practicing in nephrology, critical care or any acute medical specialities.

## **COURSE DIRECTORS**

Dr Ben Walsh

Associate Professor in Nephrology at University College London and Honorary Consultant Nephrologist, Royal Free London NHS Foundation Trust

Dr Chris Laing

Divisional Clinical Director, Emergency Services, UCLH NHS Foundation Trust/Consultant Nephrologist at the Royal Free London NHS Foundation Trust and Honorary Senior Lecturer in Nephrology at University College London

Professor Robert Unwin

Professor of Nephrology and Physiology at UCL and Honorary Consultant Nephrologist, Royal Free London NHS Foundation Trust