

Clinical Careers in
ENDOCRINOLOGY
AND DIABETES



An exciting career in **ENDOCRINOLOGY AND DIABETES AWAITS YOU**

Hormones are one of the basic ways in which the body regulates its function. When these controls go wrong there can be profound effects on a person's life. These can range from changes in physical appearance, through important functions such as energy levels, weight issues, sex and reproduction, to psychological wellbeing. As endocrinologists and diabetologists, we are privileged to share the most fundamental and intimate aspects of our patients' lives, and by correcting the underlying hormonal issues, to help improve their problems.

ENDOCRINOLOGY AND DIABETES OFFERS A VARIETY OF CAREERS IN MEDICINE. WHETHER YOU WANT TO:

- **Look after people** with long term conditions and become involved in their lives
- **Unravel clinical puzzles** and make diagnoses to improve quality of life
- **Work in cutting edge research** to gain new understanding of basic processes, or develop new investigations and treatments



Dr Stephanie Baldeweg
Consultant Physician, Associate
Academic Dean, Honorary
Senior Lecturer and Chair of
the Society's Clinical
Committee 2019-2022.



Working in **ENDOCRINOLOGY AND DIABETES**

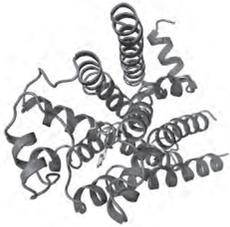
A broad training in endocrinology and diabetes can lead to a variety of options to specialise in sub-specialisms. The setting can vary from small hospitals to tertiary referral centres and from working in the community to working in the University academic setting. Continue reading to find case studies of clinicians who have found a satisfying and varied career in endocrinology and diabetes.

Endocrine and metabolic diseases are already common and are further increasing in prevalence, making the need for more medical students to train in endocrinology and diabetology more and more pressing. Specialists in endocrinology and diabetes are required to have a wide set of skills because endocrine diseases can affect every physiological system in the body. The patient is at the heart of the work of an endocrinologist, and there are often more opportunities to see the same patients repeatedly as their treatment evolves and their disease is managed and sometimes cured. An investigative approach is vital as specialists are faced with patients with rare diseases that require personalised and creative diagnosis and treatment.



Endocrinology & Diabetes

THROUGH TIME



1850s

Adrenal glands shown to secrete active substance

1902

First hormone, secretin, discovered

1914

Isolation of thyroxine

1935

Isolation of testosterone

1940s

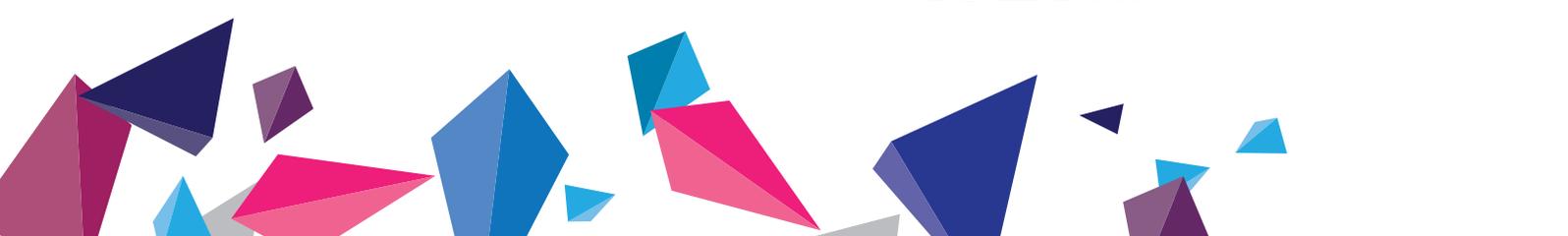
Discovery of adrenal cortex hormones

1869

A medical student, Paul Langerhans, discovers a unique group of cells in the pancreas



1921 Banting and Best discover insulin



1976

Invention of
the insulin
pump



1955

Determination of
the mechanism
of hypothalamic
control of the
endocrine system

1990s

Insulin pens become
readily available



RECENT ADVANCES

- Islet cell transplantations
- Discovery of kisspeptin as a potential fertility drug
- Closed loop insulin delivery system
- Genome sequencing becomes widely available

1970s

Discovery of peptide
hormone production
in the brain



1969

Insulin structure is determined
by Dorothy Hodgkin

1994

Discovery of leptin
hormone that
controls hunger
and metabolism

Physicians AT WORK



Dr Asif Ali

Consultant Physician in
Endocrinology and Diabetes,
Milton Keynes Hospital

During my early training at a district general hospital, I was fortunate enough to find an endocrinologist role model. I am now a physician specialising in endocrinology and diabetes and general (internal) medicine.

One moment I am engrossed in trying to connect some faint diagnostic dots, and then I'm helping someone with possible cancer or diagnosing the cause of a fever of unknown origin.

I have seen future generations of specialists in endocrinology and diabetes metamorphose before my eyes and it fills me with great pride to play a part in their development; whether one is interested in the purely clinical side and developing subspecialist interests, basic science, clinical research skills, leadership or education, there is something for everyone.



Dr Gaya Thanabalasingham

Registrar in Endocrinology
and Diabetes, Oxford Deanery

As a specialist trainee in endocrinology and diabetes, I worked in district general hospitals for my first two years of training. This provided me with a good grounding in common endocrinology and diabetes and general medical conditions. I took time out of training to pursue a period of research into the accurate identification of rare genetic subtypes of diabetes to enable more personalised diabetes management for patients.

Towards the end of this research, I had my daughter and decided to complete the remainder of my clinical registrar training at less-than-full time. I now do a slot-share with a colleague.

Endocrinology and diabetes is a great specialty in which to maintain a good work-life balance.

WHAT DO YOU NEED TO BE AN ENDOCRINOLOGIST AND DIABETOLOGIST?

An interest in **people** and direct
patient contact

Excellent **communication** skills

Investigative skills

A good team player as work is
multidisciplinary

An interest in **teaching** and
training, as this is an important
part of most consultant posts

Attention to **detail**

Patient RELATIONSHIPS

Endocrinology and diabetes specialists see patients with a hugely diverse range of conditions. Many patients can be 'cured' and get better. Others can be helped significantly by relieving their symptoms and improving their quality of life. Some patients need long-term follow-up; both they and their doctors value the continuity of care, and can get to know each other well.

CONSULTANT'S PERSPECTIVE: Dr Pratik Choudhary

Management of type 1 diabetes is a complex interplay of education, behaviour and technology.

With Heather's case we were initially able to use the latest technology with continuous glucose monitors to automatically suspend insulin delivery when she was hypoglycaemic. However, this was not enough, and we had to proceed to islet cell transplantation. We delivered insulin-producing islets from a deceased donor into her liver and she is now almost completely free from hypoglycaemia.

Judging the right treatment for the patient, responding to changes and supporting patients through a challenging pathway is what makes endocrinology and diabetes so interesting and rewarding.

PATIENT PERSPECTIVE: Heather Young

Hypoglycaemia has been a big problem for me for most of my diabetic life. I eventually lost my driving licence and was unable to work or go out alone for fear of hypoglycaemia.

Major problems began with my first pregnancy and became worse over the years. I slipped into unconsciousness when my blood sugar was low, and there were many occasions when I would be comatose and would need an injection of glucagon. I later started using pump therapy, which I felt gave me more control, but hypoglycaemic episodes were still a problem.

The impact of having an islet cell transplant has been amazing; I can now reapply for my driving licence and return to a normal life!

347
million
people worldwide
suffer from
diabetes



Breaking new **FRONTIERS IN RESEARCH**

Since its clinical fundamentals are underpinned by complex physiology, endocrinology and diabetes is a unique specialty with many varied research opportunities on offer. From basic research into the mechanisms of endocrine and diabetic disease, to developing and testing novel therapeutic agents on patients, there is something for everyone.



Dr Andrew Lansdown

Clinical Research Fellow
and Registrar, Cardiff
University

What drew me to the specialty?...interesting, challenging and unusual cases and its ability to keep me interested for the next 40 years!

Having completed my Core Medical Training, I took up my post with the all-Wales specialty training programme in endocrinology and diabetes.

I took time out of the programme to pursue research while continuing part-time with clinical medicine. My project has focused on cardiometabolic and sympathetic activation in polycystic ovary syndrome, and aims to determine how central drivers from the brain play a role in the syndrome and its metabolic consequences.

The opportunity to take time out in research has been invaluable, lending a helpful insight into the joys and challenges involved. I am currently writing up my MD, and have just returned to full-time endocrinology and diabetes specialty training.



Dr Marie Freele

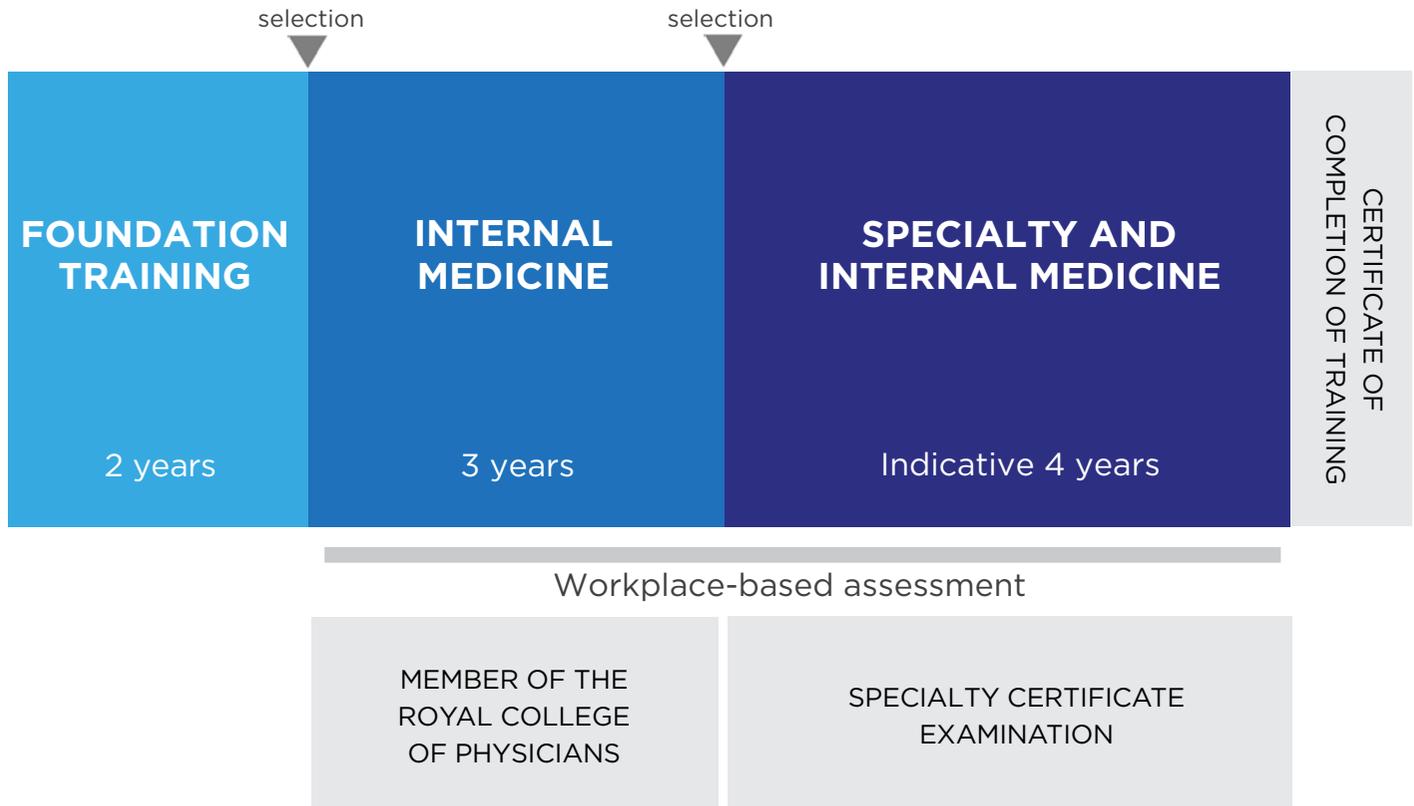
Clinical Senior Lecturer
in Endocrinology and
Consultant Endocrinologist,
Glasgow

Academic medicine is challenging and results in added time pressures but the variety, flexibility and time spent in clinical or research centres abroad is fantastic. You will never be bored!

I first became interested in endocrinology during my foundation training. The main appeal was the variety of fascinating clinical cases, the need to interpret complex diagnostic tests, the ability to participate in clinical research as well as the enthusiasm of my colleagues. Fourteen years later, I can say that all of these aspects remain true! Endocrinology and diabetes lends itself well to a career as a clinical academic and many prominent clinical researchers in the UK have this background.

I completed my PhD, then registrar training as a clinical lecturer, which allowed me to maintain a research interest. I recently undertook an MRC Clinical Scientist Fellowship exploring the role of steroids in hypertension and cardiovascular disease.

Endocrinology and Diabetes **TRAINING PATHWAY**



Intergrating research **INTO YOUR CAREER**

Dr Louise Hunter and Dr Shazia Hussain demonstrate how endocrinology is an excellent choice for curious minds who want to combine research and the clinic.



Dr Louise Hunter

Specialist Trainee and Clinical Research Fellow, Manchester

I love endocrinology because we look after people young and old, with conditions which affect every aspect of life. We have to be good general physicians, with diagnostic and communication skills.

My 'lightbulb' moment was during a stint with a Dutch research group, as an Erasmus student. My supervisor told me that "hormones shape the way we perceive the world". It's true and, a decade later, I still think it's really cool. Later, as a Foundation Trainee, many of the brilliant consultants and registrars I worked with were endocrinologists. I realised it was an ideal specialty for combining research and clinical work and set about trying to make it work for me.

Now, I'm winding up a PhD which has somehow combined nuclear receptors, circadian biology and metabolism. I've been out-of-programme for three years, and will be returning to specialty training. It has been (and will undoubtedly continue to be) challenging to juggle two strands to my career, but I've been well-supported by both clinical and academic colleagues. And I'm never bored.



Dr Shazia Hussain

Endocrinology and Diabetes SpR, London

I am currently writing my MSc thesis and am excited to be returning to my clinical rotation later this year where I hope to apply what I have learnt to my day to day practice.

Working as a Specialist Registrar in Endocrinology and Diabetes has given me numerous opportunities to develop both my clinical and non-clinical skills. After spending over 3 years of my registrar training rotating between district general and teaching hospitals I was keen to develop my interest in medical education and leadership. In order to achieve this, I took two years out of programme to work as an undergraduate clinical teaching fellow alongside which I started my MSc in medical education.

Upon completing my teaching fellowship, I was successfully appointed as the RCP Chief SpR at St Bartholomew's Hospital where I have had the opportunity to gain a greater understanding of hospital management and service improvement.

Exploring **ENDOCRINOLOGY AND DIABETES**



1. Sign-up to a careers event near you

For example: attend the National Endocrinology and Diabetes Taster Day; RSM Specialty Careers Fair or an institutional careers day.



4. Join the Society for Endocrinology

It will allow you to network with leaders in the specialty, access grants as well as many other opportunities opportunities



2. Read first-hand accounts

Discover the motivations and rewards of a career in endocrinology at: www.endocrinology.org/careers/



5. Explore other societies

The Association of British Clinical Diabetologists (ABCD), Young Diabetologists and Endocrinologists Forum (YDEF) and Diabetes UK (DUK) websites



3. Explore the training pathway

on the Joint Royal Colleges of Physicians' Training Board (JRCPTB) website www.jrcptb.org.uk



6. Attend SfE, ABCD, Diabetes UK and YDEF training events

Attend many meetings free of charge!

www.endocrinology.org

www.diabetologists-abcd.org.uk

www.youngdiabetologists.org.uk

www.diabetes.org.uk





The UK home of endocrinology. We bring together the global endocrine community to share ideas and advance our discipline. As a membership organisation, we support scientists, clinicians and nurses who work with hormones throughout their careers. We also engage policy-makers, journalists, patients and the public with hormone science to encourage informed health decisions, and to demonstrate the value of endocrinology to the wider world.

CLINICAL CAREERS IN ENDOCRINOLOGY AND DIABETES

was compiled and edited in 2014 by the Society for Endocrinology with contributions from:

Dr Asif Ali, Dr Steve Ball, Dr Rose Bland, Dr Ben Challis, Dr Pratik Choudhary, Dr Anna Crown, Dr Maralyn Druce, Dr Marie Freel, Dr Mark Gurnell, Mr Prem Jareonsettasin, Ms Parisut Kimkool, Dr Andrew Lansdown, Dr Rebecca Lee, Dr Stuart Little, Dr Konstantinos Manolopoulos, Dr Anna Mitchell, Ms Jessica de Mouteney, Dr Robert Murray, Dr Munachiso Nwokolo, Dr Richard Quinton, Dr Aled Rees, Professor Rebecca Reynolds, Dr Angela Rogers, Professor Peter Selby, Dr Francesca Swords, Dr Gayathry Thanabalasingham, Dr Alexandra Ward, Professor John Wilding, Ms Heather Young and the following patient support groups: Living with CAH, British Thyroid Foundation and Turner Syndrome Support Society.

Updated in 2019 with contributions from Dr Stephanie Baldeweg, Dr Louise Hunter, Dr Shazia Hussain.

© 2014, 2019 Society for Endocrinology. Company Limited by Guarantee. Registered in England No.349408. Registered Charity No. 266813

