

The image shows a modern, multi-level office building interior. A prominent feature is a glass-enclosed staircase with a metal handrail, leading to an upper level. The ground floor is a computer workstation area with several desks, each equipped with a computer monitor and a blue office chair. The desks are arranged in rows, and the chairs are facing away from the camera. The ceiling is high and features recessed lighting. The overall atmosphere is professional and contemporary.

MEYR International Research Fellowship

Ministry for Education, Sport, Youth, Research and
Innovation, Malta

Overview

This fellowship represents an exciting opportunity to train in Research through undertaking a research project with The University of Sheffield, UK. The project will be supported and funded by the Ministry of Education, Sport, Youth, Research and Innovation in Malta. The research will be led by the University of Sheffield and the theme of the project will be Endocrinology based, entitled “Diagnosis and Management of Adrenal Insufficiency”. The successful applicant will be expected to have evidence of excellent clinical achievements and possibly previous academic and research experience. The fellowship will allow the candidates to carry out a research project and achieve experience in academic work. It will allow travel abroad to a highly reputed research centre to learn different research techniques and to gain clinical experience through observation. The post is a competitive one and candidates will be chosen by a selection board of experts. The post will give an opportunity to the appointed candidate to upgrade his/her CV and achieve high standard academic qualities and also to apply for a self-funded University degree e.g Msc at the University of Malta. Candidates from all areas of Health Care and any Specialty are allowed to apply.

Funding

The successful candidate is expected to be in a paid clinical post in Malta and the Fellowship will support doing research on top of their current post. The Fellowship will provide a €50,000 grant to the University of Sheffield to cover the project costs. The Fellowship grant includes up to €10,000 to cover travel and accommodation for the successful applicant to spend time in Sheffield with supervisors and as an observer of the clinical service. The respective employer will need to approve the application for this fellowship and commit to an allocation of a minimum 8 weeks of the year spent at The University of Sheffield.

Person Specification

The evidence provided in the application should be according to the following criteria. A range of selection methods to measure abilities in these areas including reviewing the online application, seeking references, inviting shortlisted candidates to interview and other forms of assessment action relevant to the post.

Theme	Essential	How assessed	Desirable	How assessed
Qualifications	Basic Health Related University Degree	Application form		
			MRCP (or equivalent)	Application form
Clinical experience	Ability to apply sound clinical knowledge and judgement to problems	Application form/ Interview		

	Experience of working in Medicine related areas	Application form / interview		
	Ability to prioritise clinical need	Application form/ Interview		
	Ability to maximise safety and minimise risk	Application form/ Interview		
			Research Experience	Application Form/Interview
Teaching and training	Experience of teaching medical students and junior doctors	Application form/ Interview	To have the ability and willingness to teach at all levels and to all groups of staff	Interview
Continuous Professional Development	Evidence of participation in CME/CPD in the last 12 months	Application form/ Interview		
Management and Administration			Management experience	Interview
Clinical governance and audit	Committed to and understands the principles of clinical governance	Interview	Active involvement in a clinical governance programme	Interview
	Understands the principles outlined in the GMC document <i>Good Medical Practice</i>	Interview		
Personal attributes	Demonstrates ethical and sound behaviour	Application form/interview		
	Good time management skills	Interview		
	Good oral and written communication skills	Application form/ Interview		

About the Research Team at the University of Sheffield

The appointed fellow will be working in the area of Endocrinology and will be supervised by:

Dr Miguel Debono MD FRCP PhD - Consultant in Endocrinology, Diabetes and General Medicine at Sheffield Teaching Hospitals NHS Foundation Trust. He is also an Honorary Senior Clinical Lecturer in Endocrinology at the University of Sheffield. See link: [Dr Miguel Debono | Medical School | The University of Sheffield](#)

Professor Richard Ross MBBS MD FRCP – Professor of Endocrinology at the University of Sheffield and Theme Lead for Diabetes and Endocrinology. See link: [Professor Richard J Ross | Medical School | The University of Sheffield](#)

Professor JohnNewell-Price MA Phd FRCP – Professor of Endocrinology at the University of Sheffield and Clinical Lead for Endocrinology Sheffield Teaching Hospitals NHS Foundation Trust. See Link: [Professor John Newell-Price | Medical School | The University of Sheffield](#)

About the Research Team in Malta

Professor Stephen Montefort M.D., Ph.D., F.R.C.P.– Professor of Medicine and Respiratory Medicine is the Head of Medicine and Deputy Dean at the Faculty of Medicine and Surgery at the University of Malta. He will oversee the fellow during the MEYR international research programme – see Link: [Prof. Stephen Montefort - L-Università ta' Malta \(um.edu.mt\)](#)

Professor Stephen Fava MD FRCP PhD – Professor of Medicine and Diabetes and Endocrinology and Head of Medicine Mater Dei Hospital. He will oversee the fellow during the MEYR international research programme - see Link: [Prof. Stephen Fava - L-Università ta' Malta \(um.edu.mt\)](#)

Post Graduate Programme Director

About the Department where Fellow will be carrying out Research

The Department of Oncology & Metabolism delivers world leading research and teaching in a dynamic and exciting research environment with access to world class facilities. We host a dedicated team of academic and clinical specialists, independent research fellows, postdoctoral research scientists and professional services staff.

The vision is to achieve research excellence and impact by translating scientific discoveries into meaningful advances that can benefit our patients and the general population. This vision is supported by competitive funding from major national and international research bodies including Government, Research Councils, industry and charities.

Research in Oncology and Metabolism is organised into four areas:

Bone and Joint research brings together scientists and clinicians that specialise in benign bone disease and is home to the world class Mellanby Bone Research Centre (<https://mellanbycentre.org>) as well as being a key partner in the Centre for Integrated Research into Musculoskeletal Aging (<https://www.cimauk.org>).

Cancer research spans the full cancer spectrum from ground-breaking discovery science to innovative clinical trials. The University of Sheffield is world leading in bone oncology, as well as translational research. It forms

part of the Experimental Cancer Medicine Centre (ECMC) network in recognition of clinical trials expertise, bringing together a multi-disciplinary team of internationally recognised scientists and clinicians.

Its research in **Endocrinology** ranges from discovery science to the delivery of advanced clinical care. With leading reputation in diabetes research in particular the effects of the disease on the cardiovascular system and central nervous system as well as educating patients on self-management.

Its research on **Reproduction** spans the spectrum of gamete development, through fertilization and human pregnancy and birth. The University of Sheffield specialises in research into reproductive failure and infertility as well as fetal/obstetric imaging to diagnose problems during pregnancy and the management of pre-term birth.

The Department offers Postgraduate Taught and Research programmes in Endocrinology and Diabetes, Reproductive and Developmental Medicine, and Translational Oncology. The academic staff are heavily involved in and contribute to the teaching and learning in the undergraduate medical curriculum at the University of Sheffield.

Fellowship Description

Responsibilities of the Fellowship

- Contribute fully as researcher, in fulfilment of the ideals of '[The Sheffield Academic](#)' and the MEYR.
- Conduct personal research by determining and implementing research objectives in line with departmental and faculty strategy.
- Contribute to, and build cross-research group activity, where appropriate.
- Disseminate research findings through conference presentation, publications in high-quality, peer-reviewed journals, and produce other appropriate outputs (e.g. patents).
- Will make a full and active contribution to the principles of the 'Sheffield Academic' and the MEYR. These include the achievement of excellence in applied teaching and research, and scholarly pursuits to make a genuine difference in the subject area and to the University's achievements as a whole.

Research Area - Diagnosis and Management of Adrenal Insufficiency

Background

Cortisol measurement is important in the assessment of adrenal function and also used for assessing the adequacy of hydrocortisone replacement and as a marker of stress in studies of human behaviour. It is also used in the measurement of excess cortisol levels. The measurement of **blood** cortisol is inconvenient and expensive involving venepuncture and either a visit to the clinic or hospital admission. In contrast, the measurement of **salivary** cortisol is relatively non-invasive and convenient for the patient as it can be done at home and posted to the laboratory. Salivary steroids are very stable at room temperature up to a week and are now being routinely used clinically on the NHS. This technique reduces hospital visits and is overall cheaper than conventional methods used to diagnose adrenal disorders, this reducing health care costs for the state. We have just completed a NIHR RfPB grant where we have shown that a waking salivary cortisone can predict the outcome from the routinely used Short Synacthen Test by 95% and the test obviates the Short Synacthen Test in 70% of cases being investigated for adrenal insufficiency (Debono et al NEJM

Evidence 2022 – in print). It is estimated that the test could save the NHS in England 10 million pounds a year.

Quantifying steroids accurately is crucial for the diagnosis of many endocrine disorders. For the past forty years, steroid hormones have been measured by immunoassays, initially by manual radioimmunoassay or enzyme immunoassay then by automated systems. Immunoassays do not always give accurate results. They lack specificity as are often compromised by cross-reactivity and matrix effects. The use of these test strategies to quantify the same analyte may give different results and therefore a lack of concordance between assays may lead to missed diagnosis or unnecessary treatment of patients, risking worsening morbidity and increased mortality. To overcome this problem mass spectrometry techniques have been used and are gaining popularity. Gas chromatography/mass spectrometry (GC/MS) or liquid chromatography/tandem mass spectrometry (LC-MS/MS) methods are precise, accurate and most importantly specific for target steroids, and sensitivity is comparable to ultra-sensitive steroid immunoassays. In Malta measurement of hormones is carried out using immunoassays and the introduction of tandem mass spectrometry techniques to measure hormones would be an important step forward in the health care system. This would result in more accurate testing reducing the risk of patient mismanagement.

Patients with adrenal insufficiency irrespective of being on steroid replacement treatment still suffer from increased morbidity such as a poor QOL, cardiovascular disease and bone related problems. Mortality rate is also elevated. Novel therapeutic strategies are essential and a number of new treatments are being developed such as modified release oral formulations of hydrocortisone.

In Malta 7,000 patients are on oral steroids and 17,000 on steroid inhalers. 50% of patients on oral steroids and up to 20% of patients on steroid inhalers, usually those on high dose inhaled steroids are at risk of adrenal insufficiency and therefore Malta provides a pool of patients that could benefit from novel investigations and treatment strategies.

Potential Projects for Fellows

1. Studies using novel diagnostic techniques in patients on steroid treatment with or at risk of adrenal insufficiency
2. Studies related to the treatment of adrenal insufficiency

As part of the fellowship in addition to carrying out a research project the fellow will be able to spend time in Sheffield as part of an Observership and the following programme has been set up:

Maltese Trainee Academic Programme -

1. Travelling at the start of the Fellowship to Sheffield for the fellow to be introduced to the team and to initiate the research project;
2. Carrying out periods of the research project in Sheffield;
3. Attending supervised Speciality clinics as observer at Sheffield Teaching Hospitals following a flexible programme designed based on Trainee necessities;
4. Attending speciality MDT meetings on a weekly basis;
5. Gaining experience on NHS Investigation units;
6. Supported to attend national conferences, meetings and submission of abstracts.

Reward Package

Terms and conditions of fellowship:

Funding Reward:

- €50, 000 grant to the University of Sheffield to cover
- research costs for project
- travel/accommodation (up to maximum €10, 000 /fellowship)

- Does not cover salary costs as candidate expected to be in clinical post with salary.

Selection – Next Steps

Closing date: Monday 31st October at noon

Informal enquiries

For informal enquiries about this job and the recruiting department, contact: Dr Miguel Debono on m.debono@sheffield.ac.uk or on 00447760192117.

For administration queries and details on the application process, contact: Ms Svetlana Grech on Svetlana.a.grech@gov.mt or on 25981213.

To Apply

Interested candidates are asked to apply through the Microsoft Form available on: <https://forms.office.com/r/4rFbs5Xqez>

They are to provide the following:

- Full Curriculum Vitae to include
 - Personal Details
 - Education and Qualifications
 - Clinical Experience
 - Academic Experience
 - Research Experience
 - Reason Applying for Job (maximum 300 words)
 - Approval by your employer – note signed by supervisor to approve the application for this fellowship and commit to allowing a minimum 8 weeks of the year spent at The University of Sheffield.
 - Two Referees