Equivalence Application NES

**XXXXX,** Senior Respiratory Physiologist

Department, Hospital Board

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# Current Role:

The Association For Respiratory Technology and Physiology (ARTP) membership number: XXXX

The Registration Council For Clinical Physiologists (RCCP) membership number: XXXXX

The European Respiratory Society (ERS) membership number: XXXXXX

I possess a Biological Science degree, followed by BSc PTP-equivalent clinical physiology training (from a programme now recognised by AHCS). My work-based postgraduate development touches the key domains of Good Scientific Practice with STP equivalence emerging over 5 years of postgraduate practice. I work at three sites in [NHS BOARD]: the Hospitals (listed). I perform and interpret all routine pulmonary function tests and more specialised testing such as cardiopulmonary exercise testing (CPETs), which are either physiologist, respiratory consultant or consultant anaesthetist led, ambulatory oxygen assessments, shunt measurements, forced oscillometry and challenge tests. Where I act as lead physiologist I then advise senior medical staff on the test finding, its limitations and alternatives.

The Departmentis a University teaching hospital and a tertiary centre for many specialities: I am involved in multi-disciplinary groups - teaching staff such as nurses, doctors, physiotherapy students, and physiology trainees. I have mentored physiology assistants successfully through the ARTP certificate in spirometry. I am a member of the clinical liaison group for Scotland’s clinical physiology (PTP-equivalent) degree at the XXXX University, where we steer course and examination content; I have acted as an examiner for the practical exams and also as a technical examiner for the ARTP Professional Qualification Exams.

In the last few years I have taught the STP students during their respiratory rotations and acted as a mentor and online assessor

I am active in hospital-funded and commercial led research and I personally conduct audits and studies. I have published and presented my work. I liaise with the Clinical Research Facility, the Research Governance Officer and the Research and Development department. Research activity is an important aspect of renewing my Good Clinical Practice certification every 2 years. I am active in initiatives to foster public and patient involvement, and have carried out courses such as Sage and Thyme (listening to patients), smoking cessation, liver transplant and medicines adherence.

I have participated in the promotion of wider healthcare science community through Science week events, national HCS events and most recently the Skills Scotland Edinburgh event.

# Generic Healthcare Science Experience

My first degree was a BSc in Biological Science where I studied Medical Microbiology and Immunology, therefore I entered clinical physiology with a thorough grounding in laboratory based healthcare science. In terms of STP equivalence, I have gone on to develop an appreciation of the work of the hospital laboratory service, including infection control and immunology as part of my clinical role. I work with the medical physics service particularly for equipment commissioning and maintenance; I work closely with colleagues from cardiac, vascular and sleep physiology. My mentoring of STP trainees has included those from GI physiology. I have followed the development of healthcare science closely in Scotland, particularly in terms of the policy agenda and our response in NHS Board to the National Delivery Plan for Healthcare Science 2015-2020. As part of my professional body activity, in March 2014 I attended an All Party Parliamentary Group Meeting at Portcullis House, Westminster, London to raise awareness for the need for statutory regulation in Clinical Physiology, which gave me further exposure to the policy context for our group.

As part of our remit we often have to access x-ray reports, CT and blood test results and this has greatly increased my knowledge in these areas and widened my appreciation of the roles in the multi-disciplinary team. I work closely with the vascular and liver transplant anaesthetists as I carry out CPETs on patients that are being assessed pre-operatively for Abdominal Aortic Aneurysm (AAA) repair, aortobifemoral bypass grafts and liver transplant assessments. The vascular anaesthetist carries out the full consultation prior to the test being carried out during which I am present. My last STP student was based in Vascular Science so I had the opportunity to learn more about the ultrasound tests used including, an AAA screening, a Deep Vein Thrombosis calf screen, carotid screen and also the measurement of Ankle Brachial Pressure Index (ABPI).

During CPETs I perform and interpret resting and exercise ECGs and have visited the cardiology department to observe cardiac physiologists perform ETTs. I have also been present during a chest pain rapid access clinic with the chest pain nurse.

I studied sleep physiology during my clinical physiology degree and have built upon this foundation with visits to the department to observe patients being tested.

I attend events involving all healthcare science disciplines, for example the Academy for Healthcare Science meetings, a stand for Healthcare Science Week in the main mall of the hospital where I worked closely with perfusionists and also the Skills Scotland Event where I was involved with promoting healthcare science in conjunction with staff from medical physics and the laboratories.

# Leadership and Organisation Experience

In 2012 I carried out an NHS Education for Scotland’s Early Career leadership course (a four-day programme for healthcare science staff), I have also completed e-learning courses on change management, coaching and mentoring, conflict management and time management and most recently a signpost to management course.

To enhance my training in and understanding of patient, carer and staff complaints I attended a course on the power of apology.

To support my active role in teaching and mentoring I have attended the Train the Trainer course through XXXX University and I help to write training plans and material for the BSc and STP departmental students. I have also attended a NES course on facilitating education.

Daily I delegate tasks to other staff members and allocate inpatient workload.

I am responsible for stock control and the procurement of consumables and equipment for a Respiratory Physiology Service with 17 staff performing over 56700 tests per year.

I ensure that our department is up to date on current practice, guidelines and protocol by searching journals and being active on the ARTP forum. This includes liaison with pharmaceutical Industry representatives who seek access to the service to ensure appropriate education of staff regarding new devices and inhaled drugs.

# Healthcare Science Divisional Experience and Overarching Theme Experience

My postgraduate development in the workplace has included mentoring of STP trainees from other physiology disciplines, shadowing other physiologists and working with other professions from across cardiology, vascular science, anaesthesia, immunology and medical physics.

# Research Experience

I am highly motivated in the area of Clinical Research and have pro-actively sought out opportunities to do research in my time in Respiratory Physiology.

In lieu of a formal masters, I hold a current GCP certificate through the Clinical Research Training Scotland portal. This is analogous to Good Scientific Practice, with the local requirement to refresh learning for NHS [BOARD] research active staff. Through my work, I have developed an understanding of the principles of hypothesis formation, ethics and consent, experimental design, sources of error, and statistical treatment of clinical data. My knowledge has developed through my workplace involvement over many years in a range of clinical research trials such as:

* Physical Activity as a Crucial Patient Reported Outcome in COPD(Proactive)- 2009
* A Phase 2, Randomized, Double-Blind, Placebo-Controlled, Multi-Centre Study to Assess the Efficacy and Safety of GS-6624 in Subjects with Idiopathic Pulmonary Fibrosis (Gilead)- 2013
* TD139, A Novel Inhaled Galectin-3 Inhibitor for The Treatment of Idiopathic Pulmonary Fibrosis (IPF). Results from The First in (IPF) Patients Study (Galecto)- 2014
* A Phase 2, Randomized, Double-blind, Placebo-controlled, Efficacy and Safety Study of Inhaled JNJ-49095397 (RV568) in Subjects With Moderate to Severe Chronic Obstructive Pulmonary Disease (Janssen)- 2014
* Clinical study of inhaled alpha 1 anti-trypsin to treat AAT deficiency(Kamada)- 2014
* SupPoRtive Exercise Programmes for Accelerating REcovery after major ABdominal Cancer surgery (PREPARE-ABC)- 2017
* Efficacy and safety of nintedanib in patients with Progressive Fibrosing Interstitial Lung Disease (PF-ILD)- 2017

I have led the following research and presentations:

* An audit of adverse events during pulmonary function testing(PFT) and cardiopulmonary exercise testing in pre-operative abdominal aortic aneurysm (AAA) patients- ERS Congress Barcelona (07-11/09/2013) oral presentation, ARTP Conference Hinckley (07-09/02/2013) poster, Scottish ARTP Meeting, Edinburgh (10/05/2013) oral presentation. Article for ARTP journal “Inspire” December 2013
* Fractional exhaled nitric oxide and challenge testing- Scottish ARTP Meeting, Edinburgh ( 30/05/2014) oral presentation
* An Audit Into Time Taken For Common Respiratory Function Tests Over Two Hospitals-

Scottish ARTP Meeting (29/05/2015) poster. Winner of the Barbara Oatway award

* Comparison of the cost of objective respiratory testing and inhaled medication in the diagnosis of asthma- Academy for Healthcare Science Meeting , Edinburgh (07/12/2015) poster
* The prevalence of previously unrecognised respiratory pathology in patients attending for cardiac surgery-Thematic poster, ERS Congress Milan 2017
* Does a screening spirometry test, on the world COPD day 2015 at the Brussels European Berlaymont building, reveals tobacco influences' among their employees?D. Schuermans. Thematic poster, ERS congress Milan 2017

# Speciality Experience From Within The Healthcare Science Theme

I perform and interpret routine and more complex respiratory investigations and advise clinicians on which tests would be best to discern a diagnosis such as, peak expiratory flow, ventilatory capacity and response to bronchodilators, lung volumes (Helium dilution and body plethysmography), gas transfer and flow volume loops, maximal mouth pressures, FOT, oxygen saturation, exhaled CO, FeNO, 6 minute distance, incremental walking tests, bicycle exercise tests, tests to detect presence of and assess protection of exercise induced asthma, skin prick testing, histamine challenge tests, mannitol challenge tests, CPETs and shunt estimations.

In additional to a full range of specialist competencies in respiratory physiology comparable to STP learning outcomes, I strive to extend my skill set and the development of the profession. I am a member of the ARTP workforce committee and work on the ARTP stand at conferences such as the Winter BTS meeting. I encourage the promotion of CPD for others and as how to record it is within our committee’s remit: I have written an article on this for the Inspire Journal (01/12/2014). I chaired a session at an ARTP conference on lung regeneration (22/01/2015). These wider activities supplement my core specialist skills when advising a range of senior clinical staff on the validity and significance of patient test results.

The UK Inhaler Group is a [coalition of not-for-profit organisations and professional societies](https://ukiginhalerstandards.educationforhealth.org/about-us/#UKIGmembers) with a common interest in promoting the correct use of inhaled therapies. I have been the ARTP representative in this coalition since 2014.

I enjoy teaching and have been asked to present on FeNO at the Scottish Allergy and Respiratory Academy on two occasions (08/09/2015 and 15/03/2016).

The respiratory medicine department has weekly lunch-time meetings, which I attend to gain greater knowledge in my field. I attend the Royal College of Physicians evening events on differing topics to greater understand the illnesses and treatments of my patients.

I have acted as a technical examiner for the ARTP Professional Qualification Examinations.