



SCHOLARSHIP REPORT

This report should be completed by recipients of awards and scholarships from the Royal College of Physicians and Surgeons of Glasgow on completion of the activity for which they received their award or scholarship. Please complete all sections of the report form.

Please return your completed report via email to: scholarships@rcpsg.ac.uk

Or via mail to: **Scholarships Committee Administrator, Royal College of Physicians and Surgeons of Glasgow,
232-242 St Vincent Street, Glasgow G2 5RJ, UK**

Please use typeface when completing this form.

SECTION 1 | PERSONAL AND AWARD DETAILS

Title	Dr	PID	58457
Surname	Tan	Forename(s)	Alfred Bingchao
Scholarship/award awarded	College Travelling Fellowship	Amount awarded	£2000

SECTION 2 | PROJECT/VISIT DETAILS

Name/Title	Prostate artery embolization (PAE) for Benign Prostatic Hypertrophy (BPH)
Location	1) University Hospital Southampton NHS Foundation Trust 2) St Louis Hospital, Lisbon, Portugal
Aims and objectives	<ul style="list-style-type: none">• Familiarisation of the patient selection criteria• Understanding the pelvic vascular anatomy. Understand the prostate artery anatomy and its normal variants• Learn the technical skills needed to perform the intervention such as the choice of catheters, embolic agents to use, rotational catheter angiography, transradial approach• Management of complications• How to follow up patients PAE• Updates on the current research in PAE.

<p>Summary</p> <p><i>Include methodology, results and conclusions if applicable</i></p>	<p>This scholarship enabled a weeklong trip to University Hospital Southampton (UHS), UK and a second week to St Louis Hospital in Lisbon, Portugal. Both trips took place in August 2019, one after the other.</p> <p>Dr Tim Bryant, Consultant Interventional Radiologist was my supervisor during my time at UHS. UHS was the first UK hospital to offer the treatment in 2012. Together with Professor Nigel Hacking, the both of them conducted a multi-centre study to compare the results of PAE versus conventional surgery via a registry known as the UK-ROPE. The results of the study led to the National Institute for Health and Care Excellence (NICE) updating its guidance for the use of PAE as a treatment for benign prostatic artery embolization. During this visit, I had one on one tutorials on the theory behind prostate artery embolization and saw PAE performed by Dr Bryant.</p> <p>The second visit to St Louis Hospital was under the supervision of Professor Tiago Bilhim. His mentor, Professor Juan Pisco, pioneered the technique of prostate artery embolization at St Louis Hospital and put Lisbon on the map of the interventional radiology community. Sadly, Professor Pisco passed away in 2019. Over the last decade, hundreds of interventional radiologists and urologist were welcomed to this small hospital to learn more about PAE. Along with Prof Bilhim, they have performed over 2000 PAE procedures and contributed extensive high quality research on this subject.</p>
<p>Learning outcomes</p> <p><i>Detail here how the aims and objectives were met</i></p>	<p>Both attachments were similar in their style of exposure and learning.</p> <p>My supervisors started with extensive teaching on the general and detailed anatomy of the pelvic and prostate arteries. One of the technical challenges with prostate artery embolisation is the vast number of collateral and branch vessels in the pelvis where failure to accurately embolisation the right vessel could lead to serious complications of non-targeted embolisation. I was made to go through multiple CT angiograms of the pelvic arterial anatomy and tasked to map and classify the vessels accordingly. The basic grounding in this topic on a daily basis helped to improve my confidence in anatomical appreciation during the actual procedure.</p> <p>This was a non-practical observership but the opportunity to watch multiple cases by the two operators was particularly helpful to ingrain the steps involved. Both supervisors were extremely enthusiastic and took the time to explain every step that they were doing and offered ample opportunities for me to ask them questions. Being high volume centres, I saw many different catheters/microcatheters and embolic agents like particles and spheres being used to perform PAE.</p> <p>The practical aspect of PAE was only a part of setting up the practice. I was also given one to one teachings on how to set up a clinic, selecting the right patients, preparing them for the procedure, and dealing with complications that arose and also how to follow up my patients in the post-procedure phase.</p> <p>Professor Bilhim was especially kind and shared lots of his wisdom on the current research in PAE. He also explained the results of his most recent study looking at balloon occlusion assisted embolisation of prostate arteries and his latest randomised control trial looking at the efficacy of different embolic agents in PAE.</p> <p>The doctors and the rest of the interventional staff were extremely friendly and I was made to feel like a member of their team. I also got to see how their labs were run and also learnt more about the IR training in their centres.</p>

Evaluation

How has this scholarship/award impacted on your clinical/NHS practice or equivalent?

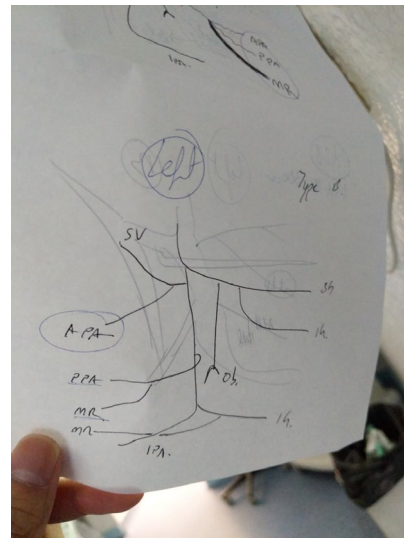
The opportunity to learn more about this novel treatment for BPH in men would not have been possible without the generous support from the Royal College of Physicians and Surgeons Glasgow.

The travelling scholarship is a unique travel award that provides support for trainees and junior consultants to attend short training courses that sometimes do not meet the eligibility criteria for study leave funding.

Along with my other consultant colleague, Dr Navin Mathias, we are currently in the process of setting up the prostate artery embolization service in NHS Lanarkshire. We recently consulted a patient who had self-referred for PAE after learning about its minimally invasive and fast recovery benefits.

The knowledge that was acquired during this fellowship allowed us to consult the patient with greater confidence and gave the patient the assurance that this procedure would be benefiting.

PAE is also offered as a treatment procedure for BPH within NHS Greater Glasgow and Clyde.



3D CT angiography of the pelvic arteries, Catheter angiogram of the left prostate artery, One of the daily prostate artery and pelvic artery drawings.



t Louis Hospital, Lisbon, Portugal



Myself with Prof Tiago Bilhim and the rest of his staff.



Myself with Dr Tim Bryant and the other UHS Consultants.



SECTION 4 | EXPENDITURE

Breakdown of expenditures

Please demonstrate how the scholarship/award funding was used to support your project/visit

Flights – £300
Accommodation – £1000
Subsistence - £700

Total - £2000

SECTION 5 | PUBLICATION

Scholarship/award reports may be published in College News. Please tick here if you agree to your report being published.

I give permission for my report to be published in College News

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