



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	138406
Surname	Davies	Forename(s)	Timothy
Scholarship/award awarded	Travelling Fellowship	Amount awarded	£2000

SECTION 2 PROJECT/VISIT DETAILS	
Name/Title	Cochlear Implant Surgical Observership
Location	Scottish National Cochlear Implant Centre
Aims and objectives	<ol style="list-style-type: none"> 1) To gain an understanding of the clinical course for patients who undergo cochlear implantation. 2) To gain exposure to the operative sequence and some of the operative challenges that face surgeons during cochlear implantation. 3) To gain an understanding of the indications for cochlear implantation and the circumstances in which cochlear implantation is not appropriate.
Summary <i>Include methodology, results and conclusions if applicable</i>	<p>I was very fortunate to undertake a 1-week surgical observership at the Scottish National Cochlear Implant Centre at University Hospital Crosshouse. I had worked previously with the ENT team at Crosshouse hospital but this was unfortunately during the first wave of the COVID-19 pandemic when the Cochlear Implant service had to close temporarily. I have since moved away for my training so I was very grateful for the opportunity to return, having missed out previously.</p> <p>The week involved a combination of clinic based and operative activities, which was aimed at me gaining an appreciation for the patient journey through the cochlear implant service.</p> <p>In clinic I saw a number of patients being considered for cochlear implantation. The Scottish National Guidelines for cochlear implantation dictate that a patient must have >90dB hearing loss in both ears, with <50% speech discrimination and have minimal improvement with conventional hearing aids, to be eligible. I was fortunate to see the audiometric work up being undertaken as well as clinical consultations between cochlear implant specialists and their patients. I was struck by the multi-disciplinary approach adopted by the department as a whole, drawing on the expertise of each member to allow for patient centred, multi-specialist decision making when considering patients for cochlear implantation.</p>

	<p>Cochlear implantation is undertaken via a post-auricular incision and cortical mastoidectomy. The short process of the incus is identified which acts a surgical landmark for the facial recess, which is a space between the facial nerve and the chorda tympani in the middle ear. The facial recess is drilled until the stapedius tendon and the pyramidal eminence are encountered. These are the anatomical landmarks for identifying the round window. The round window is a space into the cochlea, which is made wider with a 1mm diamond burr before insertion of the cochlea implant. The internal processor of the Cochlear implant is harboured in a shallow compartment drilled in the lateral aspect of the temporal bone. Scientist from the cochlear implant team then undertake intra-operative monitoring of the device to ensure that it is functioning and correctly inserted prior to the end of the procedure. This allows for any changes to be made to the implant position to be made intra-operatively to ultimately improve the chance of good functional outcomes.</p> <p>I observed a Cochlear implantation in theatre for a young boy who had lost his hearing following bacterial meningitis. This case highlights the unique geographical challenges facing the cochlear implant team at the Scottish centre. This service covers a vast geographical area and it is testament to the team as a whole that a young boy who lost his hearing in Inverness on Friday was in theatre having hearing saving surgery 5 days later. It is essential that patients who lose their hearing secondary to bacterial meningitis have prompt cochlear implantation, within a 7 day period, due to the risk of cochlear ossification which precludes implantation out with this timeframe.</p>
<p>Learning outcomes <i>Detail here how the aims and objectives were met</i></p>	<p>I definitely think the aims of this travelling fellowship were met. I gained an appreciation for the pre-operative work up for patients awaiting cochlear implantation as well as the intra-operative sequence and the post-operative follow up for these patients. I also gained an appreciation for the indications for cochlear implantation in Scotland and how these differ from the rest of the UK.</p>
<p>Evaluation <i>How has this scholarship/award impacted on your clinical/NHS practice or equivalent?</i></p>	<p>I am very grateful to the college for awarding me with this scholarship which has ultimately allowed me the opportunity to gain exposure to a specialist aspect of clinical practice which isn't undertaken in my deanery. Furthermore, this has allowed me to gain experience in an area that I missed out on due to the COVID-19 pandemic.</p> <p>As I continue my career in Ear, Nose and Throat, this experience will allow me not only to have a greater appreciation and understanding for the indications for cochlear implantation and technical challenges facing clinicians undertaking cochlear implantation. It will also allow me to adapt a more patient centred approach when managing patients with profound deafness for whom cochlear implantation may be their only chance to hear again.</p>



SECTION 4 | EXPENDITURE

Breakdown of expenditures

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

This award has been used to fund travel, accommodation and sustenance during this 1-week surgical observership at the Scottish Cochlear Implant Centre, University Hospital Crosshouse, Kilmarnock, Scotland.

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

If your report is selected for publishing, the editor of College News will be in touch to discuss this with you.

All Information concerning you as an individual will be held and processed by the College strictly in accordance with the provisions of the General Data Protection Regulation (GDPR) (Regulation (EU) 2016/679). Such data will be used by the College to administer its relationship with you as a Fellow or Member. We will not, without your consent, supply your name and address to any third party except where (1) such transfer is a necessary part of the activities that we undertake, including the provision of library services (if applicable) or (2) we are required to do so by operation of law. As an individual you have a right under the General Data Protection Regulation (GDPR) (Regulation (EU) 2016/679) to obtain information from us, including a description of the data that we hold on you. Should you have any enquiries about this right please contact Membership Services Administrator at the College.