

##### **POSITION DESCRIPTION – Alfred Junior Medical Staff**

**DATE REVISED: July 2023**

**POSITION: Neuromodulation Clinical-Research Fellow**

**AWARD/AGREEMENT: AMA Victoria – Victorian Public Health Sector**

**– Doctors in Training Enterprise Agreement 2018 - 2021**

**CLINICAL PROGRAM: Alfred Brain**

**DEPARTMENT/UNIT: Neurology**

**DIVISION: Operations/ Medical Services**

**ACCOUNTABLE TO: Director of Epilepsy and Head of Epilepsy Neuromodulation Service**

**TIME ALLOCATION (HRS/WK): 0.5FTE**

**ALFRED HEALTH**

Alfred Health is the main provider of health services to people living in the inner southeast suburbs of Melbourne and is also a major provider of specialist services to people across Victoria. The health service operates three outstanding facilities, The Alfred, Caulfield, and Sandringham.

Further information about Alfred Health is available at www.alfredhealth.org.au

**OUR PURPOSE**

To improve the lives of our patients and their families, our communities and humanity.

**OUR BELIEFS**

Our staff are expected to demonstrate and uphold the beliefs of Alfred Health:

* Patients are the reason we are here – they are the focus of what we do
* How we do things is as important as what we do.
* Respect, support and compassion go hand in hand with knowledge, skills and wisdom. Safety and care of patients and staff are fundamental
* Excellence is the measure we work to everyday. Through research and education we set new standards for tomorrow.
* We work together. We all play vital roles in a team that achieves extraordinary results.
* We share ideas and demonstrate behaviours that inspire others to follow.

**DEPARTMENT**

The Alfred Hospital has a 6-bed video-EEG epilepsy unit as part of a comprehensive epilepsy program that specialises in epilepsy surgery. In 2022, an epilepsy neuromodulation service was commenced at Alfred Health, and in 2023 the first epilepsy deep brain stimulation (DBS) cases will be implanted. The first chronic subthreshold stimulation (CSS) cases are planned for 2024.

In tandem with the clinical epilepsy neuromodulation clinical program, an epilepsy neuromodulation research unit is being developed to utilise the clinical data generated from the program and to advance the field. The current domains of the research program are: (i) predictors of outcomes of VNS, DBS, and CSS therapy, (ii) evaluating the utility of temporal (trial) therapeutic stimulation during sEEG to design and predict outcomes in DBS & CSS, (iii) the utility of subscalp-EEG in predicting outcomes to and monitoring responses to neurostimulation therapies, (iv) non-invasive neurostimulation for epilepsy.

**Title**

Epilepsy Unit, Department of Neurology, Alfred Hospital

**POSITION SUMMARY**

**Neuromodulation Clinical-Research Fellow**

**KEY DUTIES AND RESPONSIBILITIES**

It is expected that the fellow will take a leading role in the epilepsy neurostimulation service. This includes:

* Epilepsy neuromodulation & general epilepsy clinic (weekly)
	+ Attend Friday afternoon epilepsy clinics which alternate between Epilepsy Neuromodulation and General Epilepsy
	+ Program and troubleshoot device-based stimulation, including VNS, DBS, and CSS
* Epilepsy Surgery Clinic (fortnightly)
	+ Attend the fortnightly surgical clinic under supervision by consultant neurologist
* Movement disorders DBS clinic (fortnightly)
	+ Attend a fortnightly movement disorders DBS clinic with Dr Hugh Simpson, clinical lead for the epilepsy neurostimulation service
* Epilepsy surgery and DBS multidisciplinary team (MDT) meetings
	+ Coordinate, prepare, and present DBS, CSS, VNS, and other neuromodulation candidates
	+ Record MDT note in the electronic record and dictate report letter for GP
* Invasive neurostimulation – coordination:
	+ Take a leading role in coordinating the invasive neurostimulation cases – deep brain stimulation (DBS), chronic subthreshold stimulation (CSS), and vagus nerve stimulation (VNS) – including case schedules, waiting lists, and required investigations and evaluations.
* For epilepsy DBS/CSS cases:
	+ Pre-implant workup:
		- Lead the non-invasive data collection and analysis.
		- Present at the fortnightly Epilepsy Surgery MDT
		- Coordinate and order pre-DBS/CSS investigations and evaluations. Be primarily responsible for the investigations and ensuring they are performed with enough lead-time before each case
	+ DBS/CSS implant planning
		- Become proficient using BrainLab and Stealth software to plan the draft of electrode trajectories.
		- Coordinate with scientists and neurosurgeons and lead DBS/CSS neurologist to confirm electrode requirements for each case
	+ DBS/CSS implantation
		- Attend each surgical implantation and accompany consultant with DBS intra-op monitoring
	+ Post-implant electrode localisation
		- Perform contact localisation and review with Consultant
	+ Post-implant inpatient care
		- Daily ward round of patient & acting as first point of call for any ward-based epilepsy issues
		- Perform and document ‘monopolar review’ of implanted devices where relevant: systematic exploration of effects and side-effects of stimulation for each contact
		- Record LFP from recording-capable devices
* Therapeutic trial stimulation during sEEG
	+ Attend trial stimulation and based upon experience, perform trial stimulation with consultant supervision. This will include systematic exploration of stimulation parameters, with qualitative and quantitative review of response, and documentation of results.
* Non-invasive neurostimulation – coordination and participation
	+ Coordination of clinical and research non-invasive neurostimulation services – transcranial magnetic stimulation (TMS), transcranial direct current stimulation (tDCS), trigeminal nerve stimulation (TNS), transcutaneous vagus nerve stimulation (tVNS), and low intensity focused ultrasound (LI-FUS).
	+ Performing with supervision, and if appropriate, independently, therapy sessions for non-invasive neurostimulation
* VEM reporting
	+ Participating in the video EEG monitoring (VEM) reporting schedule, shared amongst the epilepsy fellows
* sEEG case planning and monitoring
	+ Participate in the shared sEEG fellow roster for planning and monitoring sEEG implantations
		- Plan selected sEEG cases based on non-invasive data and create an electrode plan in BrainLab or Stealth, under consultant supervision; present at MDT
		- Daily review of sEEG inpatients and sEEG monitoring data for the duration of the admission, under consultant supervision
* Neuromodulation research
	+ Ensure the neurostimulation RedCap database is maintained and up to date
		- Liaise with research and clinical staff in maintaining the database
	+ Participate in neuromodulation research projects under supervision of the Head of Epilepsy Neuromodulation
* Participate in clinical trial activities (e.g. patient visits and medical assessments, EEG reading, etc.) to support the epilepsy neurosciences clinical trial program, in particular trials related to neuromodulation.
* Attendance
	+ Attendance at monthly movement disorders DBS multidisciplinary team meetings
	+ Attendance at the weekly video EEG Monitoring (VEM) meeting on Fridays

**Additional key responsibilities:**

* Ensuring timely discussions with patients and their family, providing counselling and support where required
* Supervision of more junior medical staff within the Unit – education of junior staff in clinical management and procedural techniques (where the Fellow is appropriately skilled).
* Thoroughly and promptly correlate and document in the health record the relevant patient information in an appropriate and ongoing manner, from the initial assessment, differential diagnosis, investigations, treatment plan and clinical progress
* Regularly review patient objectives, interpretative, physical and mental status, including the development and communication of a discharge plan from the time of admission
* Appropriately liaise with all staff involved in the care of the patient, including communication and referrals necessary for ongoing care post-discharge
* Foster rapport and good communication using appropriate language, written or verbal, with the patient and other parties as required, including contact with the referring Medical Practitioner
* Use technology appropriately, with cost benefit and potential patient benefit and complications considered
* Counsel and support patients and their families or carers
* As a representative of the health service and the medical profession, present a professional appearance and demeanour at all times
* Continually update and extend personal medical knowledge and skills, regularly attend clinical and educational meetings and remain familiar with current medical literature
* Participate in Program /Departmental/Unit Quality Improvement and audit activities

**Education**

It is expected that the fellow would also be involved in the educational activities of the Department of Neurology which include:

* Weekly joint clinical meetings with the Departments of Neurology
* Weekly neuroradiology meetings
* Monthly neuropathology meetings
* Fortnightly University Department of Neuroscience seminars

**Research:**

The fellow will be directly involved in the Clinical-Research Epilepsy Neurostimulation Program. The role will include:

* Meeting regularly with the Epilepsy Neurostimulation nurses and research assistant to maintain the Epilepsy Neurostimulation Outcomes database
* Assisting with higher degree students undertaking neurostimulation and device related projects. This is primarily assisting with data collection, eg reviewing, annotating, and extracting EEG data.
* Participate in clinical trial activities (e.g. patient visits and medical assessments, EEG reading, etc.) to support the epilepsy neurosciences clinical trial program, in particular trials related to neuromodulation.

**Core Competencies and Goals of Fellowship**

At the end of the 12-month fellowship, the fellow is expected to have knowledge of epilepsy neurostimulation exceeding a general epileptologist. This includes:

* Understanding the indications and eligibility for neurostimulation modalities
* Selection of the appropriate neurostimulation modalities for individual patients
* Select appropriate investigations and assessments for comprehensive evaluations of patients planned for neurostimulation therapies
* Reading sEEG recordings and being able to contribute to the planning, performance, and interpretation of therapeutic trial stimulation during sEEG.
* Drafting DBS and CSS implantation plans
* Intraoperative monitoring for and inpatient care of patients during invasive stimulation device implantation admissions (DBS and CSS)
* Initial and subsequent outpatient post-operative reviews of patients with implantable stimulation devices (VNS, DBS, CSS), including programming, troubleshooting, and monitoring for efficacy and side effects of stimulation.
* Designing and monitoring of appropriate stimulation treatment plans for non-invasive neurostimulation techniques (TMS, tDCS, tVNS, TNS, LI-FUS)

**SUPERVISION**

**Alfred Health Approach**

All junior medical staff (including Fellows) at Alfred Health work under supervision. Supervision can be either direct

or indirect and MUST be provided by a more senior doctor. In the case of a Fellow, the supervision is provided by

a consultant. The nature of the supervision provided will depend on the complexity of the care being delivered and

the experience of the junior doctor.

Direct supervision is defined as supervision where the designated supervisor is either present where the care is

delivered or is on-campus and available within a few minutes.

Indirect supervision occurs where the designated supervisor is not present but available by telephone for advice

and to attend in accordance with Unit and Alfred Health requirements.

Fellows may work under both direct and indirect supervision.

The Alfred Health approach should not be confused with the Medical Board of Australia supervision guidelines for limited registration which apply to the registration requirements of international medical graduates (Supervised practice for international medical graduates, January 2016) http://www.medicalboard.gov.au/Registration/International-Medical-Graduates/Supervision.aspx).

**SCOPE OF PRACTICE**

Scope of practice is the extent of an individual medical practitioner’s approved clinical practice within a particular

organisation based on the individual’s credentials, competence, performance and professional suitability and the

needs and capability of the organisation1

Fellows should be proficient in most of the skills and procedures outlined in the Australian Curriculum Framework

for Junior Doctors (ACF version 3.1 2012) Further information is available at

**www.cpmec.org.au/page/acfjd-project****.**

**Core Scope of Practice for Junior Medical Staff**

This includes

Venepuncture; IV cannulation; Preparation and administration of IV medications; injections and fluids; Arterial

puncture in an adult; Blood culture (peripheral); IV infusion including prescription of fluids; IV infusion of blood and

blood products; Injection of local anaesthetic to skin; Subcutaneous injections; Intramuscular injections; Performing

and interpreting ECGs; Performing and interpreting peak flow; Urethral catheterisation in adult males and females;

Airway care including bag mask ventilation with simple adjuncts such as pharyngeal airway; Wide bore NGT

insertion; Gynaecological speculum and pelvic examination; Surgical knots and simple suture insertion; Corneal

and other superficial foreign body removal; Plaster cast/splint limb immobilisation.

Advanced Procedures and Skills –

Junior medical staff must NOT undertake any advanced procedures without direct supervision unless there

is specific authorisation from a consultant from the relevant Unit. These procedures include joint aspiration;

laryngeal mask & ETT placement; complex wound suturing; proctoscopy; lumbar puncture; fine bore NG tube

insertion.

• Procedures requiring specific credentialing include: intercostal catheter insertion, central venous line

insertion, Biers blocks, as well as specific procedures approved by Heads of Unit for limited operating rights.

Advanced Skills – e.g. secondary trauma survey, papilloedema identification, slit lamp examination, intra ocular

pressure estimation. For neonatal and paediatric resuscitation, Fellows who are specifically credentialed to do so,

can undertake full resuscitation. Others can commence basic resuscitation until more senior staff attendance unless

specifically credentialed for neonatal and paediatric resuscitation.

Advanced life support in adults (eg adult airway management, defibrillation/cardioversion/emergency pacing, use

of resuscitation medications and fluids) may be undertaken by trainees in emergency medicine, intensive care, and

anaesthetics, who are deemed proficient by their Unit Head.

Other medical staff who have completed approved intermediate/advanced life support training for their discipline

may undertake advanced life support with the approval of their Unit Head.

Registrars must ensure that they have undertaken the appropriate training and been deemed proficient when using

advanced skills.

It is recognised that not all the advanced procedures and skills listed above apply to all junior medical staff.

Please note insertion of fine-bore nasogastric tubes and large-bore intercostal catheters requires specific

credentialing at Alfred Health. You must not insert these unless you have been formally credentialed to do

so.

**College Standards**

For more specific information on scope of practice, refer to the relevant College publications related to training and

specific College curricula, which detail expected learning outcomes and/ or competencies at various stages of

training.

Alfred Health Consultant Notification and Escalation Requirements

Fellows play a pivotal role in informing senior medical staff (SMS) of important changes in their patients’ conditions.

Registrars must adhere to and support the following Alfred Health guidelines:

• Consultant Notification Policy; and

• Escalation of Care –adult patients Guideline;

and must encourage other junior medical staff and nursing staff to escalate concerns appropriately.

**SCOPE OF PRACTICE IN OPERATING THEATRE SUITES/ PROCEDURE ROOMS/ ENDOSCOPY**

The section below applies to Fellows that are working in these areas.

Surgical Registrars/Fellows have responsibilities in the Operating Theatre Suites and related areas but only under

the direction and supervision of the designated Specialist Surgeon. Registrars/Fellows have important obligations

to keep the designated Specialist Surgeon informed about the patients under that Specialist’s care. This includes

discussion re cases on lists prior to finalisation of lists.

Every theatre list must have a documented designated Specialist Surgeon responsible for that list. Fellow

lists with no nominated supervising surgeon are not permitted. If there is no nominated surgeon on the

theatre list, the Theatre Nurse Manager should seek clarification from the Head of Unit prior to the list

commencing.

The scope of practice, if any, that can be extended to each individual surgical registrar/ fellow without the direct

supervision of a Specialist Surgeon is determined by the Unit Head/ Director. This will usually involve the Unit

Director/Head or senior delegate undertaking the following:

▪ Discussion with the trainee regarding his/her clinical experience and competence; and/or

▪ Logbook review; and/or

▪ Consultation with the trainee’s previous supervisor: and/or

▪ Personal observation in the operating theatre.

The review of this information and the determination of scope of practice without direct supervision should be made

in accordance with the Credentialing of Procedural Trainees guideline.

Registrars/Fellows may not undertake a broader scope of practice than they have officially been granted by Alfred

Health. However, Registrars/Fellows should not feel compelled to undertake procedures without direct supervision

where they are not comfortable with the circumstances of a particular case.

The determination and documentation of scope of practice for surgical Registrars/Fellows should be reviewed 6

Monthly.

In exceptional (e.g. emergency) circumstances, a surgical Registrar/ Fellow may undertake a procedure for which

they are not formally credentialed, upon verbal advice from the Unit Director/Head or his/her delegate and the

anaesthetist in charge (and consultant back-up must be available). If this addition is agreed, it must then be formally

added to the Registrar/Fellow’s credentialing within 24 hours of the procedure.

To be credentialed for upper GI+/or lower GI endoscopy credentialing, the trainee’s Conjoint Committee log book

must be reviewed by the Head of Unit and the trainee must have completed all required procedures to achieve

Conjoint Committee certification before they can undertake endoscopy under indirect supervision. The Head of

Unit must also inform the Head of Endoscopy.

**QUALITY, SAFETY, RISK and IMPROVEMENT**

* Maintain an understanding of individual responsibility for patient safety, quality & risk and contribute to organisational quality and safety initiatives
* Follow organisational safety, quality & risk policies and guidelines
* Maintain a safe working environment for yourself, your colleagues and members of the public.
* Escalate concerns regarding safety, quality & risk to appropriate staff member, if unable to rectify yourself.
* Promote and participate in the evaluation and continuous improvement processes.
* Comply with principles of Patient Centred Care.
* Comply with Alfred Health mandatory continuing professional development requirements.
* Comply with requirement of National Safety & Quality Health Service Standards and other relevant regulatory requirements.
* Maintain responsibility for supporting enterprise security

**OTHER REQUIREMENTS FOR ALL ALFRED HEALTH STAFF**

* Ensure compliance with relevant Alfred Health clinical and administrative policies and guidelines.
* Comply with relevant privacy legislation.
* Protect confidential information from unauthorised disclosure and not use, disclose or copy confidential information except for the purpose of and to the extent necessary to perform your employment duties at Alfred Health.
* Comply with Alfred Health medication management and medication safety policies and guidelines.
* Comply with the actions set out in the relevant section(s) of the OHS Roles and Responsibilities Guideline.
* Research activities will be undertaken commensurate with the role.
* In compliance with the Victorian Chief Health Officer’s Mandatory Vaccination Directions, all Alfred Health employees must be vaccinated against COVID-19 with a TGA approved vaccine.

**QUALIFICATIONS/EXPERIENCE REQUIRED**

**Essential**

* MBBS, MD or equivalent degree enabling registration with the Medical Board of Australia;
* Successful completion of at least two years as an advanced neurology training registrar (or international equivalent) AND general epilepsy fellowship.
* Proficiency in reading scalp EEG and an introductory understanding of intracranial EEG
* Acceptance into and continuation in relevant College training program if applicable;
* AHPRA medical registration without conditions, undertakings or reprimands
* Ability to work independently and as part of a large team
* Excellent interpersonal skills and ability to build rapport with people, across a diverse range of community and cultural groups
* Demonstrated ability to use tact and discretion in communicating around issues of health
* Organisational and time management skills to meet deadlines
* Excellent written and verbal communication skills
* Proficient computer skills (word processing, databases, use of the internet and graphics)

**KEY ATTRIBUTES**

• Competencies including

o Communication

o Care management

o Building trust

o Managing work (includes time management)

o Decision making

o Patient relations

o Contributing to team success

o Safety intervention

o Building strategic work relationships

o Respecting cultural diversity

• Personal qualities

o Leadership;

o Innovative ideas;

o Demonstrates a willingness to learn; evidence of on-going professional

development to continually update personal medical knowledge and skills;

• Ability to operate in an environment of change.

**OTHER RELEVANT INFORMATION**

• Statements included in this position description are intended to reflect in general the duties and

responsibilities of this position and are not to be interpreted as being all inclusive;

• Ongoing performance reviews and feedback will be undertaken across the year. It is anticipated that a

formative and summary assessment will be undertaken during the rotation.

• Mandatory Police Check and Working with Children Check to be completed if appointed.

**COMMITMENT TO CHILD SAFETY**

Alfred Health has zero tolerance for child abuse and are committed to acting in the best interest of children in our care. We promote cultural safety and participation of Aboriginal children, children of cultural and linguistic diversity and those with disabilities to keep them safe at all times.

**Position Description authorised by:** Dr Hugh Simpson

**Date:**  04/07/2023