



Selection Regulations for Surgical Education and Training in Neurosurgery 2020 Intake

Royal Australasian College of Surgeons & Neurosurgical Society of Australasia



1 INTRODUCTION

- 1.1** These Regulations establish the principles, terms and conditions for the selection process for the Royal Australasian College of Surgeons (**RACS**) Surgical Education and Training Program in Neurosurgery (**SET Program**) for the 2020 intake conducted during 2019.

2 SELECTION CRITERIA

- 2.1** Applicants are expected as a minimum to satisfy the pre-vocational level of competence in each of the nine RACS competencies available on the RACS website at www.surgeons.org which include:
- a) Medical Expertise
 - b) Judgement – Clinical Decision Making
 - c) Technical Expertise
 - d) Professionalism and Ethics
 - e) Health Advocacy
 - f) Communication
 - g) Collaboration and Teamwork
 - h) Management and Leadership
 - i) Scholarship and Teaching
- 2.2** Applicants are expected to have adequate insight in neurosurgery to make an informed decision about the specialty as a potential career path.
- 2.3** Applicants are expected to have appropriate basic surgical skills including sterile techniques, suturing, selection and use of instrumentation and the ability to tie both single and double handed surgical knots and appropriate wound opening and closure skills.
- 2.4** Applicants are expected to be able to accurately perform detailed neurological histories and clinical examinations.
- 2.5** Applicants are expected to be able to perform the safe insertion of intracranial pressure monitors and management of the same.
- 2.6** Applicants are expected to be able to independently setup image guidance and registration.
- 2.7** Applicants are expected to be able to competently perform a safe lumbar puncture.
- 2.8** Applicants are expected to be able to independently balance, setup, and drape an operating microscope and understand the use of the controls and functions.
- 2.9** Applicants are expected to be able to perform the assessment and management priorities of a patient with severe head injury.
- 2.10** Applicants are expected to be able to perform the clinical assessment of a multi-trauma patient.
- 2.11** Applicants are expected to be able to perform the safe patient positioning for basic spinal and cranial surgical procedures.
- 2.12** Applicants are expected to be able to conduct the early management and investigation of a patient with a potential spinal injury.



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- 2.13 Applicants are expected to be able to manage the post-operative care of a patient following craniotomy.
- 2.14 Applicants are expected to be able to perform ventriculostomy placement and management.
- 2.15 Applicants are expected to be able to perform the drainage of a subdural haematoma.
- 2.16 Applicants are expected to be able to competently drape and plan a scalp incision and craniotomy flap for an acute traumatic or intracranial haematoma.
- 2.17 Applicants are expected to be able to perform the clinical assessment and interpretation of images relating to neurosurgical presentations commonly seen in an Emergency Department and provide a differential diagnosis and management plan. The presentations include, but are not limited to, degenerative spinal pathology, tumours, haemorrhage, cranial and spinal trauma.

3 ELIGIBILITY REQUIREMENTS

- 3.1 Applicants intending to apply for selection to the SET Program must register in accordance with the RACS Registration for Selection into Surgical Education and Training Policy available at www.surgeons.org. Applicants not registered cannot lodge an application for the SET Program.
- 3.2 Applicants must satisfy the generic eligibility requirements for the SET Program, being those outlined in the RACS Selection to Surgical Education and Training Policy available at www.surgeons.org.
- 3.3 In addition to the generic eligibility requirements, applicants to the SET Program must have completed a minimum 24 weeks' full-time equivalent dedicated neurosurgical experience in Australia, New Zealand or Singapore in the three years immediately prior to application. For this purpose, only neurosurgical experience obtained while employed in a hospital with a neurosurgical department in Australia, New Zealand or Singapore where the role involves pre and post-operative patient management and participation in morbidity and mortality meetings will be considered. Roles which are primarily private assisting experience will not be considered.
- 3.4 In addition to the generic eligibility requirements, applicants must have satisfactorily completed the RACS Generic Surgical Sciences Examination at the time of application.

4 APPLICATION PROCESS AND REQUIREMENTS

- 4.1 Applications can only be submitted by registered applicants using the neurosurgery online application form. Applications will open on Wednesday 27 February 2019 at 12:00pm AEDT and close on Wednesday 27 March 2019 at 12:00pm AEDT. No other form of application will be accepted.
- 4.2 Applicants must pay a selection application fee of \$AUD965 at the time of application to be considered for selection. This fee is non-refundable as of the closing date for applications and is inclusive of the examination fee.
- 4.3 Applicants for selection must disclose their complete criminal history in their application, irrespective of the time that has lapsed since the charge was laid or the finding of guilt was made. For this purpose, criminal history includes the following, whether in Australia, New Zealand or overseas, at any time:



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- a) every conviction of the applicant for an offence;
- b) every plea of guilty or finding of guilt by a court of the applicant for an offence, whether or not a conviction is recorded for the offence;
- c) every charge (including pending charges) made against the applicant for an offence; and
- d) every non-conviction charges (charges that have been resolved otherwise than by a conviction or finding of guilt).

- 4.4** The Board Chair or nominee will decide whether an applicant's criminal history is relevant and may seek advice from Board members or other representatives of the RACS in the process. If the Board Chair or nominee finds the applicant's criminal history is relevant the applicant may be deemed unsuitable for selection and the applicant may not proceed further in the selection process.
- 4.5** The Board Chair or nominee can check the criminal history of an applicant at any time during the selection process. The Board Chair or nominee can request that an applicant provide a criminal history check.
- 4.6** The information collected as part of the application and during the selection process will be used to assess the applicant's suitability for the SET Program. Information may be disclosed to other parties or where required to do so by law. The Board Chair or nominee may verify the information provided within the application with external institutions or individuals and gather additional information to process the application. Failure to provide the information requested in the application or by the Board Chair or nominee will deem the applicant ineligible for selection and their application will be withdrawn. By submitting an application, the applicant is consenting to the collection, use, disclosure and storage of the information by the Board and its agents.
- 4.7** By submitting an application, the applicant is consenting to confidential references being collected, and to the named neurosurgical consultants within the application disclosing relevant information requested as part of the Reference Report process. The applicant accepts the references are collected in confidence and that a copy of the Reference Report will not be made available to the applicant. The applicant accepts they will not be provided with additional feedback on the Reference Report or provided with the names of the neurosurgical consultants contacted.
- 4.8** By submitting an application, applicants are certifying that the information provided is correct and in accordance with these Regulations and the instructions provided in the application form. If it is subsequently discovered that the applicant has provided incomplete, incorrect or misleading information, either intentionally or by mistake, the applicant may be automatically deemed unsuitable for selection.
- 4.9** By submitting an application, applicants are consenting to members of the Board and other persons appointed by the Board Chair, in accordance with these Regulations, conducting the selection process and making decisions relating to their application and selection despite having made decisions previously that may be adverse to the applicant. This includes decisions made during the current and previous selection processes and other training and assessment matters.



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5 SELECTION PROCESS

- 5.1** Applicants who satisfy the eligibility and application requirements will be considered in open competition for selection to the SET Program.
- 5.2** The selection process uses four selection tools, each contributing the following weightings to the overall selection score out of 100:
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|---|-----|
| a) Structured Curriculum Vitae | 15% |
| b) Neurosurgery Anatomy Examination | 30% |
| c) Reference Report | 30% |
| d) Neurosurgery Semi-Structured Interview | 25% |
- 5.3** Applicants must score a minimum of 50.00% (5.5 out of 11 points) for the Structured Curriculum Vitae to be deemed suitable for selection. This will be scored in accordance with Section 6.
- 5.4** Applicants must score a minimum of 70.00% (196 out of 280 marks) for the Neurosurgery Anatomy Examination to be deemed suitable for selection. This will be scored in accordance with Section 7.
- 5.5** Applicants will receive notification of their performance in the Structure Curriculum Vitae and Neurosurgery Anatomy Examination on or prior to Friday 10 May 2019.
- 5.6** Applicants who satisfy the standards in Regulation 5.3 and 5.4 will proceed to the preparation of a Reference Report. All other applicants will be deemed unsuitable and will not proceed further in the selection process.
- 5.7** Applicants must score a minimum of 50% (36 out of 72 points) for the Reference Report to be deemed suitable for selection. This will be scored in accordance with Section 8.
- 5.8** Applicants who satisfy the standard in Regulation 5.7 will be ranked according to their combined score for the Structured Curriculum Vitae, Neurosurgery Anatomy Examination and Reference Report (which equates to a score out of 75 selection points). All other applicants will be deemed unsuitable and will not proceed further in the selection process.
- 5.9** The top 24 ranked suitable applicants following Regulation 5.8 will proceed to the Neurosurgery Semi-Structured Interview (short listed applicants). In the event two or more applicants are ranked equally, the number of short listed applicants interviewed will be increased to accommodate those equally ranked for the 24th position. All other applicants will be deemed unsuccessful and will not proceed further in the selection process.
- 5.10** Applicants will receive notification of their performance in the Reference Report and short listing for the Interview on or prior to 28 June 2019.
- 5.11** The Interview will be scored in accordance with Section 9.
- 5.12** On completion of the Interviews applicants will be ranked according to their combined score for the Structured Curriculum Vitae, Neurosurgery Anatomy Examination, Reference Report and Interview (which equates to a score out of 100 selection points).
- 5.13** In ranking for Regulation 5.12, in the event two or more applicants are ranked equally, the Reference Report score will be the differentiating factor. In the event the applicants remain equal, the Interview will be the differentiating factor. In the event the applicants remain equal, the



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Neurosurgery Anatomy Examination will be the differentiating factor. In the event the applicants remain equal, the Board will have discretion to make the final decision regarding the ranking on review of the selection documentation, applicant experience and performance.

- 5.14** Applicants who rank high enough in comparison to the intake will be deemed successful and will be allocated to a training post. All other applicants who do not rank high enough to be offered a post will be deemed unsuccessful. It is estimated the intake will be 8 trainees. Applicants will receive notification of their performance and this determination on Monday 22 July 2019.
- 5.15** Where an applicant is successful, they will receive notification of their allocated region, allocated training post for their first year of training and associated training documentation. Applicants must accept the offer in accordance with the instructions from the Board Chair within the timeframe specified and provide any documentation requested by the Board Chair. Failure to do so will be an automatic decline of the offer.

6 STRUCTURED CURRICULUM VITAE

- 6.1** Each Structured Curriculum Vitae will be scored by two people appointed by the Board Chair using a structured scoring system. Any discrepancy in the two scores which cannot be reconciled by the scorers will be reviewed by the Board Chair or nominee to determine the correct score.
- 6.2** Neurosurgical experience completed from 27 March 2016 to 27 March 2019 inclusive, undertaken as part of a dedicated neurosurgical rotation may be scored up to a maximum of **4 points**. Neurosurgical experience obtained while employed in an institution with an accredited training post for the SET Program in Neurosurgery at the time of scoring may be scored 0.04 points for each full week completed. Neurosurgical experience obtained while employed in an institution which did not have an accredited training post for the SET Program in Neurosurgery at the time of scoring may be scored 0.02 points for each full week completed.
- 6.3** Intensive care unit (**ICU**) experience completed as of 27 March 2019 inclusive as part of a dedicated ICU term may be scored 0.1 points for each full week completed, up to a maximum of **1 point**. For this purpose, the ICU must be a specially staffed and equipped, separate and self-contained area of a hospital dedicated to the management of patients with life-threatening illnesses, injuries and complications, and monitoring of potentially life-threatening conditions. Experience in a High Dependency Unit or a Cardiac or Coronary Care Unit will not be scored as ICU experience.
- 6.4** Journal articles, book chapters and case reports published or accepted for publication as of 27 March 2019 inclusive on a neurology, neuroscience or neurosurgical topic may be scored up to a maximum of **2 points** as follows provided each publication scored is on a sufficiently different topic and journal and case reports are in an indexed medical journal as identified by PubMed:
- | | |
|---|------------|
| a) Journal article 1 st or senior author in a refereed journal | 2.0 points |
| b) Book chapter 1 st or senior author in a neurosurgical text | 2.0 points |
| c) Journal article 2 nd author in a refereed journal | 1.0 points |
| d) Book chapter 2 nd author in a neurosurgical text | 1.0 points |
| e) Case report 1 st author in a neurosurgical text or refereed journal | 1.0 points |
- 6.5** Oral presentations or posters of the applicant's original work on a neurology, neuroscience or neurosurgical topic, selected through a competitive abstract process and personally presented by the applicant at a national or international scientific meeting as of 27 March 2019 inclusive may be scored up to a maximum of **1 point** as follows provided each is on a sufficiently different topic:



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- a) Poster presentation (including poster side presentations) 0.5 points
- b) Oral presentation (not including poster side presentations) 1.0 points

6.6 University qualifications completed at the closing for applications, excluding the primary medical qualification unless otherwise specifically stated, may be scored up to a maximum of **3 points** as follows:

- a) Doctor of Philosophy with a relevant thesis 3.0 points
- b) Doctor of Philosophy with a thesis in a related health discipline 2.0 points
- c) Doctor of Philosophy with a thesis in an unrelated discipline 1.0 points
- d) Doctoral degree with a relevant thesis 2.0 points
- e) Doctoral degree with a thesis in a related health discipline 1.0 points
- f) Masters degree in a relevant discipline 1.0 points
- g) Masters degree in a related health discipline 0.5 points
- h) Bachelor degree with honours by a relevant thesis 1.0 points
- i) Bachelor degree with honours by a related health discipline thesis 0.5 points
- j) A primary medical degree with honours by a relevant thesis 1.0 points
- k) Postgraduate diploma in a related health discipline 0.5 points

6.7 For clause 6.6, “**relevant**” is defined as one specifically on a neurology, neuroscience or neurosurgical topic. A “**related health discipline**” would include but not be limited to epidemiology, surgical education, traumatology, anatomy, critical care, biomedical sciences and engineering, medical imaging and basic sciences. The interpretation is at the discretion of the Board Chair or nominee.

6.8 Evidence of successful completion of any component of the Structured Curriculum Vitae may be requested from applicants at any time during the selection process. Failure to provide the requested evidence within the timeframe given may result in scoring not being allocated.

6.9 The scores for the five sections within the Structured Curriculum Vitae will be combined to provide an overall score out of a possible 11 points.

6.10 Applicants must score a minimum of 50.00% (5.5 out of 11 points) for the Structured Curriculum Vitae to be deemed suitable for selection.

6.11 For applicants satisfying the minimum standard in Regulation 6.10, the Structured Curriculum Vitae score will be recorded as a percentage. The selection tool weighting will then be applied which is 15%. As such, the applicant will receive a selection score for the Structured Curriculum Vitae out of a maximum 15 points.

7 NEUROSURGERY ANATOMY EXAMINATION

7.1 The Examination will be a single paper with 70 multiple choice neurosurgery anatomy questions and scored out of a total of 280 marks. The Examination will run for 100 minutes.

7.2 The recommended reading is Last's Anatomy, Regional and Applied, 9th Edition, 1998 (reprinted 2003) – McMinn R.M.H., Churchill Livingstone.

7.3 The Examination will be conducted in Sydney, Australia on Tuesday, 16 April 2019 at 12.00pm. The time shown is the local time for the venue.



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- 7.4 There will be no separate fee charged for the Examination. This is included in the selection application fee.
- 7.5 It is the applicant's responsibility to make the appropriate travel arrangements and to meet any costs incurred in attending the Examination.
- 7.6 Applicants must make themselves available at the scheduled Examination time and venue. Applicants who do not present for the Examination at the scheduled time and venue may not be considered further in the selection process and their application may be withdrawn.
- 7.7 Applicants must score a minimum of 70.00% (196 out of 280 marks) for the Examination to be deemed suitable for selection.
- 7.8 For applicants satisfying the minimum standard in Regulation 7.7, the Examination score will be recorded as a percentage. The selection tool weighting will then be applied which is 30%. As such, the applicant will receive a selection score for the Examination out of a maximum 30 points.
- 7.9 Applicants will be provided with their score for the Examination. Applicants will not be provided with additional feedback or a copy of the Examination paper.

8 REFERENCE REPORT

- 8.1 Applicants who satisfy the standards in Regulation 5.3 (the Structured Curriculum Vitae standard) and 5.4 (the Neurosurgery Anatomy Examination standard) will proceed to the preparation of a Reference Report.
- 8.2 The preparation of the Reference Report for each applicant will be the responsibility of two people approved by the Board Chair, with at least one being a member of the Board (the **Assessors**). The Assessors will ordinarily be neurosurgeons.
- 8.3 The Assessors together via teleconference will personally speak with three neurosurgical consultants with whom the applicant has worked to assist them in preparing a Reference Report.
- 8.4 In selecting the neurosurgical consultants to obtain information from to assist in preparing the Reference Report, the Assessors may contact any neurosurgical consultant the applicant has worked with in Australia, New Zealand or Singapore in the three years prior to application, except current Board members and those neurosurgical consultants involved as Assessors in the preparation of Reference Reports.
- 8.5 In selecting the neurosurgical consultants to obtain information from to assist in preparing the Reference Report, where possible and available:
 - a) at least one of the three will be from the applicants most recent neurosurgical rotation;
 - b) at least two of the three will be from the last 12 months of neurosurgical rotations;
 - c) priority will be given to the selection of eligible SET Program surgical supervisors, SET Program surgical trainers and heads of departments.
- 8.6 A pro forma Reference Report will be used. The Reference Report will have questions focused on each of the nine RACS competencies.



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- 8.7 Advanced notification may be sent to the neurosurgical consultants to be contacted, including information regarding the areas to be explored during the discussion which informs the Reference Report.
- 8.8 Having considered the responses from all interviews, the Assessors must arrive at a consensus score for each identified area using the scoring guidelines and scales shown in the Reference Report. Notes justifying the score given must be recorded in the Reference Report. Each area within the Reference Report is worth 4 points and there are 18 areas.
- 8.9 Applicants must score a minimum of 50% (36 out of 72 points) for the Reference Report to be deemed suitable for selection.
- 8.10 For applicants satisfying the minimum standard in Regulation 8.9, the Reference Report score will be recorded as a percentage. The selection tool weighting will then be applied which is 30%. As such, the applicant will receive a selection score for the Reference Report out of a maximum 30 points.
- 8.11 Applicants will be provided with their score for the Reference Report. As references are collected in confidence as part of the Reference Report process, a copy of the Reference Report will not be made available to the applicant. Applicants will not be provided with additional feedback on the Reference Report or provided with the names of the neurosurgical consultants contacted.

9 SEMI-STRUCTURED NEUROSURGERY PANEL INTERVIEW

- 9.1 The short-listed applicants determined in accordance with Regulation 5.9 will be eligible to present for the Neurosurgery Semi-Structured Interview (**Interview**).
- 9.2 All Interviews will be held in Melbourne, Australia on Friday, 12 July 2019. It is the applicant's responsibility to make the appropriate travel arrangements and to meet any costs incurred in attending the Interview.
- 9.3 Applicants must make themselves available at the scheduled Interview time. Applicants who do not present for the Interview at the scheduled time may not be considered further in the selection process and their application may be withdrawn.
- 9.4 Each Interview will be approximately one hour in duration and consist of four scenario and experience-based sections, each with multiple questions designed to assess the suitability of the applicant.
- 9.5 Applicants will rotate through four Interview panels. Each panel will ask the same designated section of the Interview.
- 9.6 Each panel must arrive at a consensus score for their section of the Interview using the scoring guidelines and scale shown in the Interview score sheet. Notes justifying the score given must be recorded in the Interview score sheet.
- 9.7 The Interview scoring scale is as follows:
 - a) Unsatisfactory 0 points
 - b) Improvement needed 1 point
 - c) Meets expectations 2 points
 - d) Exceeds expectations 3 points
 - e) Exceptional 4 points



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- 9.8** The panel consensus scores for the four sections of the Interview will be combined to provide an overall score out of a possible 16 points.
- 9.9** The Interview score will be recorded as a percentage. The selection tool weighting will then be applied which is 25%. As such, the applicant will receive a selection score for the Interview out of a maximum 25 points.
- 9.10** Applicants will be provided with their score for each of the four sections of the Interview. Applicants will not be provided with additional feedback or a copy of the Interview scoring sheet or questions after the Interview has been conducted.

10 REVIEWS AND APPEALS

- 10.1** An applicant may request a review of a score or decision relating to the selection process. Applications must be addressed to the Board Chair and received within 7 days of the applicant being notified of the score or decision. Applications received outside this timeframe may not be considered.
- 10.2** The review process cannot revoke the assessment of an applicant and replace the assessment with an alternate assessment unless it is established an error has occurred in the formulation of the original score or decision, or relevant and significant information existing at the time of the original score or decision was not considered or not properly considered.
- 10.3** In submitting an application, the applicant must include the grounds for the review and any relevant supporting information.
- 10.4** The Board Chair (or nominee) will undertake the review on the basis of the evidence taking into account the quality and relevance of supporting information. It is the applicant's responsibility to ensure all the evidence available to support their submission accompanies the application.
- 10.5** The Board Chair (or nominee) must make a determination in writing to:
- a) Affirm the original score or decision; or
 - b) Revoke the original score or decision and provide an alternate score or decision.
- 10.6** The applicant will be notified in writing of the outcome as determined by the Board Chair or nominee within 14 days of receipt of the application.
- 10.7** Notwithstanding the above, any person adversely affected by a decision relating to the selection process may appeal in accordance the RACS Appeals Policy.