



**College of Intensive Care Medicine  
of Australia and New Zealand**  
ABN: 16 134 292 103

# **Supervisor of Training Support Kit**

# SUPERVISOR OF TRAINING SUPPORT KIT

## INDEX

Foreword	1
1 Description of SOT Duties	2
1.1 Educational	2
1.2 Administrative	3
2 Supervisor of Training Manual	4
2.1 Orientation of Trainees	4
2.2 Training and Examination Requirements – summary	6
2.3 The Training Period	7
2.4 The CICM Primary Examination	12
2.4.1 CICM Primary Examination	12
2.4.2 Other Primary Examinations	13
2.5 Final Fellowship Examination	13
2.5.1 Application	14
2.5.2 Hot Case Assessment	14
2.5.3 Format of the Examination	14
2.5.4 Requirements for Passing the Examination	15
2.5.5 Paediatric Intensive Care Examination	15
2.5.6 The G.A. (Don) Harrison Medal	15
2.6 The Formal Project	16
2.7 Short Courses	18
2.8 Prospective Approval of Training	21
2.9 In-Training Assessment	21
2.10 Trainee Support	25
2.11 Mentoring	27
2.12 Welfare of ICM specialists	30
2.13 Trainees with Difficulties	32
2.14 Other Training Issues	34
2.15 Glossary	38
3 Useful Education Resources	39
3.1 Pertinent Medical Education Organisations	39
3.2 Useful Medical Education Journals	39
3.3 Web Based Resources	40
3.4 List of Recommended Texts for Basic Sciences	41
3.5 Suggested Intensive Care Reference List	43
3.6 Medical Education References	48
4 Organisational Training Pathway and Useful Contacts	50
4.1 Organisational Training Pathway	50
4.2 Useful Contacts	51
4.3 Supervisors of Training in Accredited Units	51
5 List of Resources	52

## **FOREWORD**

This Support Kit has been developed to assist Supervisors of Training (SOTs) with their challenging tasks. The Kit has largely been developed from feedback provided by SOTs who have communicated their areas of difficulty. Information contained within the Support Kit is correct at the time of going to press. Yet because of the constant updating and modification of regulations, policy documents and procedures within the CICM, some information will change with time. As well, some sections may need to be developed further or modified as a result of feedback from the users of the Kit. Hence the Kit should be considered as an evolving document.

Revised March 2010

## 1. DESCRIPTION OF SOT DUTIES

The task of SOT is both challenging and rewarding. This Kit is designed to support SOTs in their role as they guide Trainees throughout their pre-Fellowship education. On a broad level SOTs enhance the effectiveness of teaching programs, facilitate effective training for future intensive care medicine (ICM) specialists, and improve their own (and those of others) teaching and administrative skills. On another (more focused) level, SOTs act as a reservoir of knowledge, clinical and teaching skills, coordinate learning experiences and aim to improve evaluation and feedback to Trainees. SOT duties fall into two areas; educational and administrative.

### 1.1 EDUCATIONAL

The training of an ICM Specialist extends over a minimum period of seven years from their time of graduation in medicine. During this period a Trainee is expected to evolve from an “undifferentiated” medical graduate to an ICM specialist who is capable of working independently in any branch of the specialty.

It is recognised that exposure to training opportunities will vary greatly but the overall aim of training as noted above should be kept in mind both by Trainees and by SOTs. This Kit is intended to assist SOTs fulfil their duties with their responsibilities both to Trainees and to the College of Intensive Care Medicine (CICM).

*A SOT guides a Trainee as they grow from an undifferentiated medical graduate to a specialist.*

SOTs are vital and central contributors to the CICM training programs. They are both advocates for the Trainee in matters related to organisation of clinical duties and the link to the CICM to ensure that its requirements are met. Their duties are set out in Policy Document T-10 *The Role of Supervisors of Training in Intensive Care Medicine*. There has been much discussion on the appropriate level of seniority for the SOT. A newly graduated Fellow of the College of Intensive Care Medicine (FCICM) should have good rapport with Trainees and arguably have better understanding of their problems. A more senior Fellow may have greater familiarity with training requirements as well as knowledge of employment pressures in the specific hospital. At this point, it is preferred that the SOT should have held the FCICM for at least three years. If a more junior Fellow undertakes the responsibility, they should receive oversight from a more experienced Fellow.

The most important characteristic of all is an interest in matters relating to training and an empathic understanding of the needs of Trainees. SOTs are appointed by the Board of the CICM based on a nomination from the Director of the Intensive Care Unit. Selection of the SOT is an important task for any training department. As is indicated within this Kit, the responsibilities of the SOT can sometimes be demanding and complex. It should be noted that the SOT is responsible for optimal training in the hospital, and is thus responsible to the College and Trainees. This requirement may at times be in conflict with the administrative goals of the department. For this reason (as well as workload) the position of Director and Supervisor of Training should be separate. That said, the SOT should work closely with the Director to ensure that both educational and

administrative goals of the department are achieved. A SOT should not hesitate to seek assistance or advice from departmental or College sources whenever this is indicated.

## **1.2 ADMINISTRATIVE**

The administrative responsibilities of Supervisors of Training are also set out in Policy Document T-10 *The Role of Supervisors of Training in Intensive Care Medicine*.

The major administrative task of the SOT is to conduct and record regular in-training assessments, which also act as the record of training.

CICM Trainees spend time in other disciplines – when they do the College accepts the supervision from SOTs in the area they are training. Similarly, when Trainees from other disciplines are training in the ICU, our Supervisors of Training should provide ITAs, either on their specific provided forms or on the College ITA forms.

## 2. SUPERVISOR OF TRAINING MANUAL4

### 2.1 ORIENTATION OF TRAINEES

*Expose your Trainees to a planned orientation program.*

When a Trainee arrives at a new position they are faced with a plethora of tasks and an enormous amount of knowledge that they must master concerning staff, other Trainees, equipment and the environment within and around the intensive care department. This knowledge is essential to the smooth running of a department and for maximising the safety and efficiency of the Trainee. Much of this knowledge can be acquired through a planned orientation program for Trainees. Furthermore, exposing Trainees to a structured orientation program will help them develop sound orientation routines for themselves whenever they encounter new working situations during their later professional life.

SOTs should ensure an orientation program takes place for new Trainees which includes personnel, physical facilities, equipment, delineation of duties, hospital communication systems, stationery, administrative requirements, etc. This program should include written information and the opportunity for appropriate supervision as they become familiar with local work practices. (This orientation is often arranged by the Director or others as part of normal administrative arrangements, and need not be done directly by the SOT, but the SOT should ensure that the program is in place.)

- **Staff**

*Introduce Trainees to key staff.*

Trainees should be introduced to all key hospital staff with whom they are likely to interact. It is particularly useful if Trainees can be provided with a plan of the department and hospital staffing structure for key personnel. In addition, a list of the names and contact details (at least phone numbers) of key personnel should be given to each Trainee as part of this orientation. Meetings with key personnel should include the SOT, Director and consultant staff. Trainees should also meet with staff such as the receptionist, secretary, respiratory technicians, and senior nurses.

- **Clinical and Geographic Environment**

*Non-clinical aspects of a Trainee's life often impact their clinical performance.*

Problems encountered by Trainees may stem from a lack of familiarity with their environment. It is essential that they have a thorough knowledge of this clinical environment including the layout of the department and hospital. Because many of the problems which affect Trainee performance grow from problems arising from outside the hospital it is also best to facilitate a Trainee settling into the non-hospital environment. Simple tasks such as checking with a Trainee that they have suitable accommodation and knowledge of public transport routes, schedules, parking, cafeterias, shopping centres, recreation facilities and security arrangements in the hospital are important. Department social events foster a collegial atmosphere and make Trainees feel welcome. Although it may be argued that such things enter the realm of "baby sitting" and should not be the responsibility of SOTs, the reality is that

many clinical problems arise out of non-clinical aspects of a Trainee's life. It is well worth the SOT investing time in this area as they usually become aware of problems much earlier and can often "nip them in the bud" before they impact on the clinical work of a Trainee.

- **Equipment and Supplies**

Ensure that the orientation program for a Trainee includes comprehensive familiarisation with the location and workings of all equipment including that used for emergencies such as difficult intubation gear, the location of supplies and the processes/personnel responsible for obtaining additional supplies. By including such information within a Trainee's orientation you can ensure that he/she has this essential knowledge for working in your department as well as role-modelling an important part of the orientation process which Trainees should use should they become a SOT.

- **Procedures**

The orientation should also include familiarising Trainees with relevant procedures relevant to the operation of the department and the hospital. This will include information about routine management and emergency procedures such as:

- management of cardiac arrest and other medical emergencies
- emergency airway management
- cardiovascular resuscitation
- getting help from senior staff and when to call them
- patient handling procedures such as trauma management, role in the HDU, role in extra unit activities, transport procedures, etc.

Information about "office" procedures will include matters such as roster establishment, paging processes, completion of time sheets, leave applications and receipt of mail. The Trainee should also be clearly appraised of issues such as departmental meetings, Internet access, email, photocopying, library access/borrowing, etc.

*Orientation should include equipment, supplies and procedures.*

## **2.2 TRAINING AND EXAMINATION REQUIREMENTS – SUMMARY**

Policy Documents T-5 and T-6 *The Objectives and Competencies of Basic and Advanced Training in Intensive Care Medicine* describe the end result of the training system in educational terms. Trainees are advised to study and refer to this document frequently during training.

Training requirements change from time to time. Trainees are governed by the Regulations in force at the time of commencement of their training and Supervisors should be aware of the current Regulations (available on the Website).

- **Summary of Requirements for admission to Fellowship**

The requirements for admission to Fellowship of the College of Intensive Care Medicine by examination are summarised as follows:

- 36 months Basic Training Years
- 36 months Advanced Training Years

These 6 years must include as a minimum:

- 24 months Core Intensive Care undertaken as an Advanced Trainee
- 12 months Clinical Anaesthesia, of which a minimum of six months must be undertaken in a registrar position, in either basic training years, or during the elective advanced training year.
- 12 months Clinical Medicine, of which a minimum of six months must be undertaken in a registrar position, in either basic training years, or during the elective advanced training year.
- 12 months Elective Training undertaken as an advanced Trainee (which may be in intensive care, clinical anaesthesia, general medicine, specialist medicine, emergency medicine, surgery, research or other disciplines related to intensive care)
- Successful completion of the College Primary Examination, a Primary Examination acceptable to the Board, the RACP Written/Clinical Examinations, or another qualification approved by the Censor.
- Completion of the Medical ADAPT Course
- Successful completion of the Fellowship Examination
- Completion of a Formal Project
- Satisfactory in-training assessments over the 3 Advanced Training years

## 2.3 THE TRAINING PERIOD

Training of ICM specialists is carried out by the College of Intensive Care Medicine (CICM). Historically, many Intensive Care Trainees came from one of two directions – anaesthesia or physician training. More recently, emergency medicine trainees undertake ‘dual’ training. Many will expect to obtain a double diploma i.e. FANZCA or some specialist aspect of FRACP, as well as the FCICM. Occasional surgeons also practise ICM. An increasing number of trainees from overseas, with backgrounds in anaesthesia or medicine, choose to train in ICM in Australia or New Zealand.

Thus Trainees can come from a number of different discipline backgrounds, and an attempt has been made to accommodate this, by having flexibility in the training requirements.

The training of an ICM specialist can be conveniently divided into several phases. The first phase comprises General Hospital Experience. This is followed by, and may overlap, with 3 Basic Training Years. Finally the Trainee enters into 3 Advanced Training Years.

Full details are outlined in Regulation 5 relating to training and examinations (refer Website). The training objectives of the medical term are listed in full in *Objectives of Training: the medical term* (Policy Document T-7). Similarly the objectives of the anaesthesia term are listed in full in *Objectives of Training: the anaesthesia term* (Policy Document T-8) available on the website.

### Phase 1 – General Hospital Experience

*General Hospital Experience.*

The first part of training comprises the two years of *General Hospital Experience*. In Australia and New Zealand, regulatory authorities require that the initial 12 months are spent as a hospital intern undertaking a specified range of hospital duties (PMET – Prevocational Medical Education and Training). The CICM will accept registration as a Trainee after this first 12 month period, and the second year (PGY2) of the General Hospital Experience may be counted as the first year of the 3 Basic Training Years (BTYs). Specific requirements for PGY 2 may vary from state to state.

For many Trainees, there will be some period of alternative experience between their General Hospital Experience and commencing the BTYs. For example, the Trainee may have started down some other specialty track such as surgery before deciding to do ICM. This should not be seen as undesirable, and indeed, a broad experience may be invaluable in a later career as an ICM specialist, both for the individual and the specialty generally.

*A broad clinical grounding is important.*

SOTs may be asked for advice about appropriate hospital attachments during the first two postgraduate years. The importance of a broad clinical grounding should be stressed. While time in ICM will help determine whether the Trainee is comfortable in the specialty and wishes to proceed to specialty training, other experience must not be ignored. The second postgraduate year, which may also be the first BTY, could be an ideal time for anaesthesia or medicine, depending on

which stream of training the Trainee is going to take. For example, if the Trainee intends training via the anaesthesia route, it would be a good time to do some general medicine. If the Trainee intends training via the RACP route, it would be a good year to get some anaesthesia experience.

*Encourage potential Trainees.*

Trainees coming to ICM after work in other areas often have maturity and commitment which makes them very desirable Trainees. SOTs will often be the initial point of contact with ICM. All potential Trainees should be encouraged and if necessary directed to a colleague who can help with decision making about a career in the specialty. For some potential Trainees, it may be appropriate to undertake a period of work in a non-training position with involvement in intensive care, to clarify career choices.

*Trainees must register with the CICM, ANZCA, RACP or other College depending on which program within which they do their basic years.*

## **Phase 2 – Basic Training Years (BTYs)**

Retrospective recognition may be allowed for the first BTY (BTY1). However, for BTY2 and BTY3 the Trainee must be registered, within 3 months of starting BTY2, with the CICM, ANZCA, RACP or other Colleges, depending on which program they are pursuing. Under certain circumstances, other training, which predates the commencement of duties in a College approved position, may be recognised retrospectively.

During the BTYs, the CICM Primary Exam (or other recognised exam) will be a major endeavour for many Trainees. It must be completed before the Advanced Training Years (ATYs) will be accredited. The Primary or RACP Written/Clinical Examinations may be sat during the first ATY, but if not passed, that year will not be recognised for training. In other words, if the exam is passed, the year can be retrospectively recognised as an ATY. If this is proposed, a prospective application for conditional approval of the year must be submitted by the Trainee. Obviously the best time to sit and pass the Primary examination is during the BTYs, and sitting these examinations during ATY1 should be avoided. Additional requirements exist for those who sit the examination during ATY1 (see Regulation 5.7.4)

While the BTYs of ANZCA, RACP, RACS, and ACEM programs are acceptable, there will be a group of Trainees who will only be undertaking the CICM program. These Trainees will need a structure for the BTYs and also a way of obtaining supervision:

Two of the 3 years should be done in any combination of:

- intensive care medicine
- anaesthesia
- general medicine
- specialist medicine
- emergency medicine
- surgery
- pain medicine
- research
- other disciplines related to intensive care medicine

These years may give the Trainee a chance to fulfil the minimum requirements for anaesthesia and medicine before reaching the ATYs. The flexibility will also allow the Trainees to change to the CICM program midstream e.g. in the middle of their BTYs from another discipline without compromising or unduly extending their training.

Basic training will normally be undertaken in hospitals where departments are accredited for training by the relevant College. However, posts may be approved in other departments, provided that there is adequate supervision from a specialist in the training field, and subject to approval by the Censor. For instance, a rural or smaller hospital may be appropriate to obtain anaesthesia or medical experience.

### **Phase 3 – Advanced Training Years (ATYs)**

Although there is considerable flexibility for the recognition of training and examinations within the BTYs, the requirements for the three ATYs are more stringent. They must be prospectively approved and registration with the College must occur within 3 months of starting the ATYs.

- **Core Intensive Care Component**

Two of the ATYs are Core Years and must be completed in an accredited intensive care unit, in minimum blocks of six months.

One of these two Core Years must be a continuous 12 month period, and 12 months must be undertaken in a C24 unit in Australia, New Zealand, or Hong Kong. (Refer to the list of Accredited Intensive Care Units at section 4.2) Although desirable, these requirements do not have to be satisfied in the same year, i.e. one continuous core year could be undertaken in a C12 Unit, followed by two six month blocks in C24 Units.

One of these two Core Years may be completed in a prospectively approved overseas intensive care post.

Training for the Fellowship in Paediatric Intensive Care Medicine must include at least 18 months of the core intensive care training time in a paediatric intensive care unit approved for core training. Twelve months must be undertaken in a C24 paediatric intensive care unit. The 12 months medicine component must be within paediatric medicine.

A minimum of six months in a Senior Registrar position is also required during core training. This is a position that involves increased seniority, a lesser level of supervision than junior Trainees, and rostering independent of junior medical officers. It should include a specific on-call component. The position will also involve specific responsibility for supervision and training of more junior medical officers and involvement in research, education and administration. (Refer Regulation 5.5.5.5 and 5.7.7)

- **The Elective Component**

The remaining ATY is considered as an elective year and may sometimes be needed to complete the minimum requirements. It may be spent in any combination of:

- a) intensive care
- b) clinical anaesthesia
- c) pain medicine
- d) general medicine
- e) specialist medicine
- f) emergency medicine
- g) surgery
- h) research
- i) other discipline related to intensive care

There is no particular order in which the ATYs should be done, but at least one core ATY year must have been completed before presenting for the Final Fellowship Examination.

As explained above, before the ATYs can be accredited, the CICM Primary Examination or an approved Primary (e.g. ANZCA, ACEM, RACS) or the RACP Written/Clinical Examinations must have been passed. However, if an applicant has another approved overseas specialist qualification, they may be allowed to move straight into the ATYs. Nevertheless, all Trainees have to spend **at least** two years of the total program (BTYs + ATYs) in Australia, New Zealand or Hong Kong.

- **The Clinical Anaesthesia Component**

This period of training may be undertaken during basic or advanced training. It must be undertaken in hospitals approved by ANZCA and training must be undertaken in minimum periods of three months. Six months of the required twelve months should normally be completed in a registrar position. Prospective approval by the Censor is recommended. Refer Policy Document T-8 (available on the website) for the clinical aims of the anaesthesia training component.

- **The Clinical Medicine Component**

This period of training may be undertaken during basic or advanced training. It must be undertaken in hospitals with programs approved by the RACP, and training must be undertaken in minimum periods of three months. Six months of the required twelve months should normally be completed in a registrar position. A registrar position would normally involve supervision of junior medical officers and supervision by registered specialist physicians. Prospective approval by the Censor is recommended. For the paediatric endorsement 12 months must be spent in paediatric medicine.

Trainees, depending upon their training background, may experience difficulties in obtaining positions in anaesthesia or medicine. In this case, it is up to the Department, and the Supervisor to investigate opportunities for the Trainee and make the necessary arrangements. Refer Policy Document T-7 (available on the website) for the clinical aims of the medicine component of training.

- **Recognition of Other Training for Senior Doctors.**

The Regulations relating to Training also allow for senior trainees who have completed a Diploma in a related area of acute medicine, and who are more than 5 years post award of postgraduate diploma and working full-time in that specialty, to be assessed for ‘supplementary training’. (Refer Regulation 5.3.5.)

- **Dual Training requirements**

Trainees who are contemplating joint training towards more than one qualification must negotiate both with the relevant Censors or Assessors prospectively to ensure that their planned program meets the requirements of both bodies. For instance the ANZCA program requires that the 24 months of General Hospital Experience has no more than 6 months of a combination of anaesthesia/intensive care medicine/pain medicine – this does not apply to the CICM program. Usually, the extra training required to achieve a double diploma will require some extra training. For example, an FRACP with cardiology as the specialty, would require at least 2 years of ATYs in cardiology. The ICM section would also require a minimum of 2 ATYs in ICM. Thus there would be a minimum of 4 years advanced training. One of the cardiology years could be used as the elective year for the CICM program. Thus careful planning for both BTYs and the ATYs can reduce extra years of training to 1-2 years.

Elective time can also be used by Trainees working concurrently in the area of research – on occasion towards a PhD. However it is essential that plans are prospectively approved by the Censor. SOTs have an important role in assisting with the planning of a program that will best meet a Trainee’s needs as well as comply with College regulations.

*Trainees contemplating joint training must negotiate the requirements prospectively.*

*Successful completion of the Primary Exam requires considerable dedication and study on the part of the Trainee.*

## 2.4 THE CICM PRIMARY EXAMINATION

- **Preparation**

Successful completion of the CICM Primary, ANZCA Primary or RACP Examinations is a significant achievement for the Trainee and requires the Trainee to undertake a substantial amount of dedicated study. Trainees are advised to begin their preparation for this examination at least 12 months prior to their intended sitting date. Trainees are strongly advised to structure their approach and to pay particular attention to their time management, study skills, and choice of study environment. Most Trainees benefit from participation in formal or informal study groups with other examination candidates. The formation of these groups can be facilitated by SOTs who may contact SOTs at neighbouring hospitals in order to gather together sufficient numbers of Trainees to form an effective study group. The formation of these groups should be encouraged early in the examination preparation process.

### 2.4.1 CICM Primary Examination

- Application Procedure.

Applications to present for the examination must be made on the approved application form along with the prescribed fee to the College Training Department by the advertised closing date which is published on the CICM website.

- Description of the Exam.

The CICM Primary Examination is a Physiology and Pharmacology based examination covering the Basic Sciences in Intensive Care. Unlike other Primary Examinations it is not broken into separate Pharmacology and Physiology sections and candidates are encouraged to study across the entire curriculum as set out in the Syllabus for the Basic Sciences in Intensive Care.

The Exam is divided into Written and Oral sections. Candidates must achieve a sufficient mark in order to be invited to attend the Oral section. The Written component will be held in major cities throughout Australia, New Zealand and Hong Kong and the Oral section will be held in a capital city in Australia to be determined by the Board on a rotational basis.

#### *Written Section*

2 x 150 minute Papers comprising Short Answer questions and Short Fact questions. The Short Answer questions constitute 40% of the total mark and the Short Fact questions constitute 10% of the total mark. In total the Written Section of the examination constitutes 50% of the total mark.

### *Oral Section*

8 x 10 minute vivas. This section constitutes 50% of the total mark.

- **Requirements for Passing the Examination**

To achieve a pass in the examination candidates must achieve at score of 50% or greater in the sum of their Short Answer questions (40%), Short Fact questions (10%) and Oral Section (50%).

In accordance with Regulation 5.7.3 trainees must successfully complete an approved Primary Examination before being eligible to enter Advanced Training.

Candidates are advised to consult the *Syllabus for the Basic Sciences in Intensive Care* (Policy Documents T-4), *Notes to Candidates for the Primary Examination of the College of Intensive Care Medicine* (Policy Document Ex-1) and *the Mock Exam* on the website and previous exam reports in order to assist them with their preparation for the Examination.

#### **2.4.2 Other Primary Examinations Accepted for Intensive Care Trainees**

The following are accepted by the Board in lieu of the CICM Primary Examination:

- The ANZCA Primary Examination
- Successful completion of Basic Physician Training and the RACP Written/Clinical Examinations
- The ACEM or RACS Primary Examinations.

## **2.5 FINAL FELLOWSHIP EXAMINATION**

The Final Fellowship Examination is an “exit” examination required for all ICM Trainees from whatever basic discipline they have emerged, and is detailed in Regulation 5. Policy Document Ex-2 *General Fellowship Examination Notes to Candidates* is available on the website.

The Examination comprises written and oral sections. The written section may be taken in cities of Australia and New Zealand or other areas at the discretion of the Board. The oral sections are held in a capital city of Australia or New Zealand at the discretion of the Board. Times and application information are published by the College on the Website.

*Trainees can apply to have the basic training and exam programs of related specialty colleges accepted.*

### **2.5.1 Application**

Candidates presenting for the Fellowship Examination must:

- a) Have passed the CICM or ANZCA Primary Examination, the RACP Written/Clinical Examinations, the ACEM Primary Examination, the RACS Primary Examination, or have been granted exemption by the CICM Board.
- b) Have completed the BTYs to the satisfaction of the Censor, and
- c) Have completed at least one core Advanced Training Year in ICM.

Application to present for the examination must be made on the approved form together with the required documents and the prescribed fee, around 8 weeks prior to the commencement date of the written examination. Closing dates for examination applications are established and published on the website towards the end of the previous calendar year.

### **2.5.2 Hot Case Assessment**

In the six months prior to the closing date for the Fellowship Examination, each candidate should be certified by a SOT or nominee as having been formally assessed as satisfactory on four separate ICU cases. Documentary evidence of this should be submitted along with the application form. The candidate should perform an observed clinical assessment of a critically ill patient in a critical care facility; present their clinical findings to "the assessor" with an appropriate discussion of relevant management issues (suggested time = 20 minutes). An additional 10 minutes should then be set aside after each case to provide the candidate with feedback regarding their performance and allow for relevant discussion regarding the clinical scenario.

For candidates who are unsuccessful in the Fellowship Examination:

- Recertification of completion of 4 formative cases is required for each attempt at the Fellowship Examination.
- Application to sit the Fellowship Examination will not be accepted without documentary evidence of satisfactory completion of the formative assessments. An example of the Hot Case Assessment Form is available on the website.

### **2.5.3 Format of the Examination**

The Examination consists of three sections; the Written Section, the Clinical Section and the Cross Table Vivas. Marks are structured as follows:

1. The written section of the General and Paediatric Examinations is made up of 2 papers; each consisting of 15 short answer questions (two and a half hours).

2. The oral section of the General and Paediatric Examination comprises 2 sections: two 20 minute clinical examinations of intensive care and general medical cases, and eight 10 minute vivas.

#### **2.5.4 Requirements for Passing the Examination**

Both the total mark and the mark in each section will be considered when determining a pass/fail decision. To pass the Exam, candidates must:

- (a) achieve a total score of at least 50% (in those sections required to be sat),
- (b) not fail more than one section, and
- (c) not perform poorly in the Clinical Section. A mark of less than twelve out of thirty (12/30) in the Clinical Section is regarded as a poor failure.

TOPIC	MAXIMUM MARK	PASS MARK
Written Section 2 x 150 minute papers	30	15
Clinical Section 2 x 20 minute hot cases	30	15
Cross Table Vivas 8 x 10 minute vivas	40	20
<b>TOTAL</b>	<b>100</b>	<b>50</b>

#### **2.5.5 Paediatric Intensive Care Examination**

The Paediatric Intensive Care Examination covers the theory and practice of Paediatric Intensive Care including relevant basic sciences, anaesthesia and clinical medicine. The exam follows the same format as the general examination (see section 2.5.3). The oral/clinical sections are held annually, usually in either Melbourne or Sydney.

#### **2.5.6 The G.A. (Don) Harrison Medal**

The G.A. (Don) Harrison Medal was established by the Faculty of Intensive Care, Australian and New Zealand College of Anaesthetists in 1994. All candidates who present for the Fellowship Examination may be considered for this Award. The Medal is awarded by the Board on the recommendation of the Fellowship Examination Committee.

The Medal is awarded to the candidate who achieves the highest mark in the Fellowship Examination in the first and second exam sittings each year provided that the candidate's performance is of sufficient merit.

If two or more candidates are found to have reached the required standard and to have achieved the same number of marks, the Fellowship Examination Committee will adjudicate. Special note will be taken of the performance of the candidates in the Clinical Section of the Examination.

The winner of the G.A. (Don) Harrison Medal is advised of the Award by the President following the recommendation of the Fellowship Examination Committee. The Medal is presented at the next Annual Scientific Meeting of the College.

## 2.6 THE FORMAL PROJECT

*It is best to avoid delaying commencement of the formal project.*

- **When Best to Undertake the Formal Project**

One of the major causes of problems relating to the formal project is that Trainees wait too long to begin their project. Often a Trainee focuses upon their examinations and other clinical concerns at the expense of their formal project. Commencement of the formal project is then delayed until the final years of training. This leads to rushed projects and may result in projects of less than ideal quality and/or delay of acceptance into Fellowship because the project has not been completed in a timely manner.

Trainees undertaking dual certification with other disciplines, who also require a formal project, need to ensure that the formal project meets each of the requirements of the respective programs.

In order to maximise the quality of the project and the likelihood for timely success, it is suggested that the planning for the project commence early. Although a Trainee may complete their project at any time, ideally they should aim to avoid periods of intensive preparation for their examinations.

*The SOT has a duty to assist the Trainee to develop their Formal Project.*

Careful planning prior to the commencement of the project will maximise the likelihood of success. As soon as a suitable plan has been developed, this should be developed into a proposal with the help of the SOT. One of the duties of the SOT is to provide advice, supervision and support for Trainees planning, executing and presenting the Formal Project. The Supervisor also has the responsibility to critically review the final manuscript to ensure its suitability for submission (see Policy Document T-10 *The Role of Supervisors of Training in ICM*).

- **Aims of the Formal Project**

The objectives and administrative requirements are set out in the CICM Policy Document T-9 *Formal Project Requirements*. The College recognises that only a minority of Trainees will continue active investigative work after completion of training. However, the ability to plan, undertake, write and present a research project is an important part of training for ICM. The Trainee should acquire an understanding of research methods, an ability to critically analyse scientific literature and develop a questioning attitude to their own clinical practice.

*Trainees having difficulty choosing a project may use these guidelines.*

- **Choosing a Project**

The College has a broad interpretation of what constitutes a formal project. The Trainee is free to choose from an enormous range of topics ranging from clinical investigations or technical applications through to historical and educational issues. In their search for a project many Trainees make the mistake of assuming that there is only one suitable project that is ideal for them and that they need to identify and conduct this “perfect” project. A Trainee having difficulty choosing a project could use the following as guidelines to inform their decision-making:

- The Trainee should list three or four general areas of interest to them (e.g. medical education, pharmaceutical products, intensive care).
- Within each of these areas of interest the Trainee should write three or four discrete investigative questions or project topics.
- The SOT and Trainee should examine this list of questions or topics and eliminate those that are unmanageable, unfocused, impractical under the Trainees circumstances, too large or too small.
- The SOT and Trainee should examine the remaining questions and topics to determine if there is sufficient expertise, equipment and other resources available for the Trainee to successfully undertake the project(s). The SOT and Trainee should eliminate those which may not be undertaken successfully.
- The work undertaken for the formal project need not necessarily be the work of the Trainee alone. Collaborative studies are acceptable provided that it has been shown that the Trainee (or Trainees) contributed specifically to the study in a way which allows the identification of their contribution and that the written submission is largely their own work. However, the trainee must be the first author of the project report and should present the project at a regional or national scientific meeting. If this is not feasible, presentation at a major hospital forum is acceptable provided it involves a discussion period in which the trainee is answerable to the audience. In some cases consultant supervision may be essential for success of the project. In such cases the role of the SOT might include guiding candidates towards appropriate project supervision.
- The Trainee is then left with a choice of remaining projects any of which should lead to the successful completion of the formal project requirement. The Trainee merely needs to choose a specific project from this list. All else being equal, the Trainee should probably choose the project on this final list that is of greatest interest to them.

- **Successful Completion of a Formal Project**

The Policy Document T-9 *Formal Project Requirements* states the specific requirements for a completed project. It should preferably be a

prospective scientific study, but may be a retrospective study or a case series. Individual case reports will not be accepted.

The project must be reported in the style of a thesis or paper for journal publication. If a scientific paper is accepted for a refereed journal no further modification is required before submission. Publication is not mandatory but the paper must be presented at a scientific forum.

The SOT is required to provide written confirmation on the Supervisor's Evaluation Report Form that the Trainee has presented the project at an appropriate forum and has been a major contributor to the project and the preparation of the report. Refer to the Supervisors Report form available on the website.

The Trainee must forward either one hard copy (not bound) or an electronic copy of the completed project and the completed Supervisor's Report to the Formal Project Assessment Panel for consideration. In the event of rejection, the trainee may request reconsideration by the Training Committee. Further information can be found on the College website. Trainees are encouraged to submit their projects to the College's official Journal '*Critical Care and Resuscitation*'.

- **The Felicity Hawker Medal**

Dr. Felicity Hawker was the first Dean on the Joint Faculty of Intensive Care Medicine. The Felicity Hawker Medal is awarded annually to the Trainee, (or Fellow within one year of award of the Diploma of Fellowship) who is judged to make the best contribution at the Formal Project Session held as part of the Annual Scientific Meeting. This Session will only be open to Trainees or Fellows to present material related to their Formal Project as defined in the College's Policy Document. A cash prize is also awarded.

## 2.7 SHORT COURSES

There are a number of short courses that could be of considerable benefit to Trainees in ICM. The Medical ADAPT Program is a mandatory requirement for trainees. Trainees could get considerable benefit from some courses at particular stages of their careers.

- **ADAPT**

The aim of the Australasian Donor Awareness Program is to increase awareness of organ and tissue donation and grief counselling among health professionals caring for brain dead patients and their families, so as to facilitate a positive outcome for all.

The course is conducted over one day in centres around Australia. It is compulsory for trainees and highly recommended for SOTs.

*Trainees and Fellows value repeated exposure to practical courses such as EMST and EMAC. The ADAPT course is mandatory.*

- **ANZICS Intensive Care Medicine Course**

This course is intended for ICU Registrars in training from Australia and New Zealand and is conducted at the Box Hill Hospital in July each year. <http://www.anzics.com.au/courses.asp>

- **Australian Intensive Care Medicine Clinical Refresher Course**

The Australian Intensive Care Medicine Clinical Refresher Course is designed to help candidates pass the CICM Fellowship Examination. It is conducted in Brisbane. Apart from three introductory lectures (on the evening of the first day), sessions emulate the examination process, (e.g. trial 'clinicals' with short cases and long cases, Investigations with biochemistry, microbiology, ECGs and CXRs and vivas).

- **Australian Short Course on Intensive Care Medicine**

This course is held in Adelaide, normally in February. The function of this course is mainly to aid potential candidates for the CICM Fellowship Examination. It includes interactive elements with emphasis on the knowledge and problem solving skills required by the Intensive Care Specialist.

- **Sydney Short Course on Intensive Care Medicine**

Run by the Australian Critical Care Education Inc., this course is held annually, normally in July and is aimed at Fellowship Exam candidates.

- **EMST**

The Early Management of Severe Trauma (EMST) course has been a requirement as part of surgical and anaesthesia training and is recommended for intensive care Trainees.

The EMST program offers courses in the management of injury victims in the first 1-2 hours following injury. It has the advantage of teaching a strict method of management and allows Trainees to link up with the learning and trauma methods of surgeons, and emergency physicians.

It has the disadvantage of being hard to get into a course although courses are run approximately monthly thus early application is necessary.

- **EMAC**

Recently the Effective Management of Anaesthetic Crises (EMAC) course has been developed particularly for ANZCA Trainees. Currently this course is being offered for ANZCA Trainees as an alternative to the EMST course. At present the course consists of five modules and is run over two and a half consecutive days at a simulation centre.

**Airway Management.** In addition to techniques for dealing with difficult airways, module content includes assessment of potential airway

*Trainees should register early for an EMST or EMAC course.*

problems, systematic approaches to patients, and planning for expected as well as unexpected airway problems.

**Human Performance.** Trainees are provided with an understanding of anaesthetist performance as part of the whole medical team as well as individuals. Module content includes the psychology of human error, principles of crises prevention, human factors that influence performance and the development of a systematic approach for patient safety.

**Cardiovascular Emergencies.** Trainees are taught about both general and specific therapies for addressing perioperative cardiovascular emergencies. Module content includes emergency vascular access, cardiac dysrhythmias, myocardial ischaemia, cardiac arrest and care of the post arrest patient.

**Anaesthetic Emergencies.** Module content includes the development of effective behavioural strategies and systematic approaches to identifying and managing life threatening emergencies, problem solving using both cognitive aids and algorithms, gaining insight into ones own behaviour during emergencies and enhancing ability to work effectively within a medical team.

**Trauma Management.** Trainees are taught anaesthetic resuscitation and management of the trauma patient as it relates to anaesthesia in the perioperative patient. Module content includes early evaluation and resuscitation of trauma patients, evaluation of evolving injuries, coordination of management priorities, and the review of the trauma patient on handover.

Although there is no specific mandated time for Trainees to take this course it is suggested that Trainees take the EMAC course after they have completed the anaesthesia part of their training. This will allow them sufficient experience and familiarity with the anaesthesia environment to provide valuable grounding for the EMAC course.

Although this course has been specifically developed for anaesthetists, parts of it are extremely relevant to ICM. Fellows and Trainees who have participated in the EMAC course value the course to the extent whereby they recommend that the course should be repeated every few years. SOTs and Trainees are encouraged to participate in the course. Active participation by SOTs will help them provide authoritative advice to Trainees. Early registration is recommended.

- **BASIC**

The Basic Assessment and Support in Intensive Care (BASIC) Course is similar to the EMST course but with an emphasis on intensive care rather than trauma. The course has been designed for practitioners from all disciplines who provide care to intensive patients with particular application to practitioners from smaller units. This course would be

*Practical courses such as EMST and EMAC are invaluable educational experiences for ICM Trainees.*

suitable for SHO and Registrars in intensive care, anaesthesia, general medicine, surgery and emergency medicine.

Information on all courses available to Trainees is constantly updated on the website.

## **2.8 PROSPECTIVE APPROVAL OF TRAINING**

Trainees are required to complete an Application for Approval of Vocational Training in Intensive Care Medicine and submit this to the Training Committee via the Training Department prior to or at the commencement of each training term. The SOT is also required to complete this form. The application is then considered by the Training Committee. Should the proposed program be accredited by CICM (or another specialist College if in another discipline) then there is usually no anticipated problem. If the post is not accredited (for instance, basic training in anaesthesia, or an overseas intensive care unit proposed for elective advanced training), the trainee must ensure the application is submitted well in advance of commencing the post. Some overseas core intensive care training is now permitted, however the sponsoring unit will be required to submit detailed documentation and a job description for approval of the Training Committee.

A copy of the application form is available on the website.

## **2.9 IN-TRAINING ASSESSMENT (ITA)**

Arguably this is the most demanding activity undertaken by the SOT. Formal requirements are as set out in Policy Document T-12 *Guidelines for the In-Training Assessment of Trainees in Intensive Care Medicine*.

In-training assessment (ITA) is an invaluable assessment tool that facilitates the ongoing education of Trainees and complements other procedures for the assessment of Trainees (for example, written examinations and vivas).

The objectives of the ITA process are to:

Provide ongoing formative feedback to Trainees for the purposes of guiding further learning experiences.

Provide ongoing formative feedback to SOTs for the purpose of choosing or modifying subsequent learning experiences for Trainees, or prescribing remedial activities for Trainees.

Ensure all Trainees receive regular formative and some summative assessment in association with all terms and rotations throughout their training.

- **Process**

During the three Advanced Training Years, a 6 monthly ITA is mandatory. ITAs are highly desirable during BTYs, and will be compulsory for some of the programs. However, because of the huge variation in the manner of entry into the CICM program, ITAs are not compulsory for the BTYs of the CICM program.

At the end of each 6 month period in the ATYs, meetings must occur between the SOT and each Trainee (or sooner if the period is less than 6 months). Additional meetings between the Trainee and SOT should occur as appropriate. An interview at the beginning of the period is highly desirable but not mandatory. The purpose of such an early interview is to review the Trainee's previous experience and performance, and set appropriate goals for the next training term. At an early meeting such as this, the Trainee can show the SOT their Training Portfolio Folder, containing copies of their previous formal signed ITA forms from previous rotations. Also it is helpful, but not mandatory, for the Trainee to do a self-assessment using Section C of the ITA Assessment Form, before each ITA interview. With this information, the Trainee and the SOT can set some goals. These should be written down and the Trainee should keep them in their Training Portfolio Folder. Refer to the website for a sample ITA "Goals" form.

- **Goal Setting for Trainees**

Goals are:

- Statements of intent or an end product that a Trainee strives to attain, with the aid of their instructors.
- Useful for establishing priorities.
- Aids in suggesting particular instructional strategies.
- Important to ensure that both the Trainee and Supervisor are focusing upon achieving a common end.

Goal setting

- First determine the entry level performance of the Trainee. This information may be obtainable from the Training Portfolio.
- Second determine the expected level of performance. This level of performance may involve performance at a level commensurate with the Trainee's peers, a decrease in any discrepancy between the Trainee's current performance and performance appropriate to their experience, or a specific standard.
- Third specify the date by which the goal should be obtained. It is expected that a Trainee will have multiple goals set within each rotation. The attainment dates for specific goals may be spread across the rotation.

It is essential to ensure that goals are both relevant to the Trainee and Supervisor and feasible in terms of available resources, time and personnel.

#### Communicating goals

- Goals should be developed in collaboration with the Trainee.
- This enables the Trainee to feel ownership of the goals (as well as to take greater responsibility for their learning).
- When Trainees know what is expected of them they experience greater motivation.
- Clear goals enable both instructor and Trainee to more readily determine when a goal (e.g. specific knowledge, skill, attitude or attribute) has been achieved.

Towards the end of the 6 months training period, the SOT should seek advice from fellow specialists about the progress of the Trainee. This can be done as follows:

- a) assessment by the 3 senior staff who are best placed to provide that assessment. Each must complete sections B and C of the IT Assessment Form.

OR

- b) assessment by a consensus meeting of the senior staff of the Department to write the IT Assessment form.

From the above process, the SOT completes the formal ITA Form and discusses it with the Trainee. The final ITA form must be signed by both the Trainee and the SOT, after the Trainee has had the opportunity to add comments. It is important not to add any comments subsequent to this process. The signed original copy must be sent to the Training Department within two weeks of the assessment. A copy is to be retained by the Trainee as part of their Training Portfolio.

The great majority of Trainees will proceed through their training with no major difficulties. However, it is to be expected that an intense life experience such as specialist training (and all that goes with it) will have its ups and downs for the Trainee. Refer to the module T-33 *Trainees Experiencing Difficulties* (on the website).

When questions arise about performance issues, the Training Document T-13 *Guidelines for Assisting Trainees with Difficulties* makes some specific suggestions about the process to be followed. It is likely that problems will not relate solely to training. The SOT must work with his/her HOD. There is no place for dealing with major Trainee difficulties on a hearsay basis. Anyone making a significant complaint must document their concerns. The SOT should keep careful records of all significant interactions with Trainees – not just those related to

performance matters. Departments must use proper legal and employment processes when dealing with major Trainee difficulties. Do seek advice about such matters from your hospital Human Resources Department. The College will provide advice and help on request. Employment issues must be dealt with formally through the hospital administration.

ITA offers the opportunity for prospective goal setting for Trainees and for a review of any relevant matter related to previous terms. The process is a collaborative one between SOT and Trainee. Apart from those formal Trainee contacts required by the College process, there should be other informal contacts. SOTs should have a general idea as to the progress of all Trainees.

Supervisors of Training of Intensive Care trainees are required to conduct assessments at the end of each six month period of vocational training.

### ***2.9.1 Basic Training***

Assessments are completed using the *Basic Training – End of Term Supervisor’s Report*, which can be found on the College website.

### ***2.9.2 Advanced Training***

The ITA forms, listed below, have now been revised with a separate form used for each term. These forms can be found on the College website.

- **Elective Training**
- **Clinical Internal Medicine Training**
- **Clinical Anaesthesia Training**
- **Core Intensive Care Training – Year 1**  
This form should be used for Trainees in their first 12 months of core Intensive Care training.
- **Core Intensive Care Training – Year 2: First 6 Months**  
This form should be used for the first 6 months of a Trainee’s second year of core Intensive Care training.
- **Core Intensive Care Training – Year 2: Final 6 Months**  
This form is to be used for the final 6 months of a Trainee’s overall core Intensive Care training.
- **Final In-Training Assessment**  
Note: This form is to be used upon the completion of all advanced training by a Trainee. Please note that this form should be submitted along with the other relevant ITA form above that corresponds to the last training undertaken by the Trainee (i.e. Clinical Internal Medicine, Clinical

Anaesthesia, Elective or core Intensive Care training).

Supervisors and Trainees should discuss training goals at the commencement of each training term and may find the *ITA Goals Form*, which can be found on the CICM website, useful in this process.

Details of the assessment process are outlined in Document T-12 *Guidelines for the In-Training Assessment of Trainees in Intensive Care Medicine*, which can be found on the College website.

Assessments should be forwarded to the Training Department within two weeks of completion of the assessment.

## 2.10 TRAINEE SUPPORT

*SOTs should nurture the total growth of Trainees.*

SOTs should view their relationship with Trainees as an essential opportunity to nurture the total growth of a junior colleague rather than merely focusing upon personal or academic concerns. It is important for SOTs to realise that it is not possible for them to be all things to all Trainees or be able to solve every conceivable problem that may arise for the many Trainees in their care. What is important, indeed necessary, is that a SOT be able to identify and nominate specific personnel, counsellors or organisations who are best able to deal with Trainee problems.

*Trainee problems are typically professional, academic, administrative, career or personal.*

Trainees are exposed to numerous sources of stress similar to those encountered by all students. This includes competition with themselves and others, Primary and Final Examinations, time management issues, information overload, paucity of time for relationships and/or recreation, financial and career concerns. Moreover Trainees are also exposed to sources of stress not common to non-medical students. These include death and dying, relating to health professionals and the potential fatal consequences of making a mistake. This is a fertile environment for the generation of problems. Problems encountered by Trainees typically fall into one of five types; professional, academic, administrative, career and personal.

- **Professional**

*ICM specialists must be honest, trustworthy and empathetic.*

Some Trainees encounter significant problems with professional or ethical conduct. To be effective, an ICM specialist must be able to interrelate successfully with medical staff and colleagues. Patients increasingly demand to be treated politely and with consideration. They also expect medical practitioners to be honest, trustworthy and empathetic. Trainees may require support in these areas. This support may need to extend to professional counselling to enable Trainees to develop appropriate attitudes and conduct themselves in a professional manner. This is particularly true for Trainees who are unaware of personal limitations or who have a limited capacity for self audit. Identification and correction of a problem in this area is of paramount importance as the majority of medico-legal problems have communications difficulties as a basic cause.

*A SOT need not be able to solve all Trainee problems, but should be able to direct a Trainee to appropriate help.*

- **Academic**

This is perhaps the most obvious problem area for a Trainee. The SOT needs to identify and help those Trainees in academic difficulty. Support includes the provision of feedback and advice on preparation for examinations, study skills, time management and elective periods of study. It is important for the SOT to realise that they need not personally undertake all the above, but should feel able to identify suitable personnel to assist the Trainee in these areas.

- **Administrative**

Trainees often encounter problems of a 'when', 'who', 'where', 'what' or 'how' nature relating to the administrative aspects of their department, hospital or College. Although these questions may seem trivial to non-Trainees they are often cause for considerable unnecessary angst. Fortunately they are also among those most easy to address.

- **Career**

The wise Trainee will seek guidance about their career path. Beyond offering advice a SOT may be asked by a Trainee to provide a reference or to help prepare a CV.

- **Personal**

Problems of a personal nature are among the most sensitive, difficult yet important issues with which a SOT will become involved. Personal problems can have an enormous impact on a Trainee's overall performance, including their clinical practice. Relationship difficulties, financial worries, accommodation concerns and interpersonal conflicts are just some of the many problems that may come to the attention of a SOT. To make matters more challenging these problems usually need to be dealt with urgently in a sensitive and confidential manner.

- **Methods of Support**

It is impossible for a SOT to be able to personally deal with the enormous and varied problems that will arise from Trainees. Not only does a SOT have a limited amount of time, but problems will often arise that are outside the realm of SOT expertise or even experience. One encouraging point for the SOT to bear in mind is that most (if not all) of the problems that they encounter will have been encountered by other SOTs within the College. Hence the role of the SOT is not to solve all problems themselves but rather to know where to direct the Trainee for support.

- **Other College Personnel**

*SOTs may contact colleagues, other SOTs, or other Faculty personnel.* Page 26

Occasionally a Trainee will present with a problem that is outside the experience of a SOT. Where this happens he/she should contact colleagues, other SOTs, or other personnel within the College to seek advice. Maintenance of confidentiality (except with the Trainee's specific permission) is stressed. A list of useful contacts is included within this Kit.

- **External Support**

Most hospitals have a variety of services associated with them. These include legal advice, professional advisors, disability support, accommodation offices, chaplaincy, counselling services and a health service. These are a rich source of resources for solving Trainee problems. A finance specialist is likely to be able to assist a Trainee with their budget, management of debt, etc. A counselling service is able to provide independent qualified counsellors who are experienced in assisting Trainees with emotional and professional problems. Accommodation offices are readily able to provide lists of accommodation and the contacts of local landlords.

- **Peer Support Systems**

The pairing of a junior Trainee with a more experienced Trainee can impart large benefits to the junior Trainee. In the past these systems have had mixed success, but you may wish to try implementing such a system in your department. Successful Peer Support Systems are those whose senior Trainees are volunteers. Senior Trainees or nearly qualified specialists are ideal sources of advice for junior Trainees as they have recent personal experience of many problems encountered by junior Trainees.

- **World Wide Web**

The Internet or World Wide Web is a tremendous source of information for SOTs and Trainees. Section 3 of this Kit includes useful web resources and both SOTs and Trainees are encouraged to explore these resources to find the answers to many problems. SOTs are encouraged to give Trainees copies of the list of web resources included within this Kit. In addition, email offers an excellent interface for dealing with administrative issues or questions. Additional Internet resources include bulletin boards or talk shops where problems, issues and concerns are 'voiced' and solutions offered. Crit-iq is an example of an online resource for trainees <http://www.crit-iq.com.au/>.

## 2.11 MENTORING

Many departments have considered implementing some form of mentor scheme for their Trainees. Some training programs require the Trainee to seek a Mentor.

*External support can be invaluable for Trainees.*

*Pairing junior and senior Trainees is often extremely effective.*

Should you consider such a scheme then the following information may be of value.

*A mentor is a role model, advocate, friend and confidant.*

- **What is a Mentor?**

Mentors are a complex synthesis of role model, Trainee advocate, friend and confidant. The most effective mentors are individuals who are committed to Trainees and the profession of intensive care medicine, are self-motivated, enthusiastic, readily accessible to Trainees, sensitive to the needs of Trainees, and have a genuine desire to facilitate the growth of a Trainee into a specialist. They tend to be volunteers who are credible in the eyes of Trainees. Perhaps their most important skill is that of an effective listener as, in many cases, this will be what the Trainee needs most.

- **What is Required in a Mentor?**

Mentors need a comprehensive understanding of the department, hospital and clinical environment. It is particularly important that mentors understand that their primary role is to serve as an initial point of contact and support for Trainees. The most effective mentoring programs allow Trainees to pick their own mentors and thus a mentor should be prepared to act as a point of contact and support for all Trainees (i.e. not merely those one or two Trainees with obvious problems).

A mentor need NOT have:

- Personal experience of all training within a department.
- Comprehensive understanding of all administrative processes within a department.
- A qualification in counselling or therapy.
- In-depth knowledge of all aspects of anaesthesia.
- Health, marital or financial counselling expertise.

Rather, a successful mentor should be able to direct Trainees with problems in any of the above areas to appropriate support resources. In addition to the desired characteristics described at the beginning of this section, mentors should be able to provide the following:

*Mentors are often involved in many aspects of a Trainee's life.*

**Professional** – Mentors should understand they are perceived as role models in all aspects of their professional behaviour and should be able to offer advice/guidance on ethics and standards of professional behaviour.

**Academic** – Mentors should be familiar with the content and structure of the CICM curriculum and its objectives. They may also be able to aid with study techniques, time management, etc.

**Administrative** – Mentors should have a working knowledge of the department, hospital and CICM administrative requirements as well as the names of other mentors and mentor scheme coordinators.

Career – Mentors need a general working knowledge of the career options available to Trainees and suitable training posts.

Personal – Mentors need to be able to empathise and actively listen.

- **Getting started**

The coordinator of a mentor scheme can circulate the following information to mentors:

- Names and contact details (phone, postal, email addresses) of fellow mentors, Trainees and mentor scheme coordinators.
- Suggested possible non-threatening venues and times for an initial meeting between mentor and Trainee(s).
- A model invitation for mentors to send Trainees prior to their first meeting. This invitation must note that not all mentor/Trainee relationships will develop to provide mutual satisfaction. It is very appropriate to "try again".
- List of key people in the department, hospital and College.
- List of content-area advisors.
- Suggestion for the content and preparation of meetings between mentor and Trainee(s).

- **Other Needs**

Trainees should also be informed of the names and contact details of mentors and be introduced to these mentors. For a mentoring scheme to be successful the scheme must be valued by the department, staff and Trainees. Efforts of mentors must be both recognised and appreciated. It is also useful to ensure that the department and hospital hierarchy support the scheme and events are scheduled to maximise the profile of the scheme. Trainee involvement within a mentoring scheme can be facilitated through the invitation of Trainees (or Trainee representatives) to meet with staff to assist in the development of the scheme or to evaluate and review its success.

The extent to which mentors and Trainees relate differs markedly. Interpersonal skills, personalities and the varying needs of Trainees means that not all Trainees will develop strong ties with mentors. This is normal and, indeed, many Trainees are merely content to know that a mentor is available for them, should they choose to use one. If you decide to implement a mentoring scheme you should anticipate that the relationship between mentors and individual Trainees will develop in one of three ways:

1. Some Trainees may choose not to participate in the scheme and will only see a mentor when it is necessary or to their immediate advantage.
2. Approximately half of the Trainees will rarely initiate mentor contact and meet with their mentor only upon request.

*Once a mentor coordinator has been appointed, they can circulate important information to other mentors.*

*For a mentoring scheme to be successful it must be valued and the efforts of mentors recognised and appreciated.*

*It is unrealistic to expect all Trainees to develop strong relationships with mentors.*

*The key to successful coordination is enthusiasm, energy, commitment, position, information and administrative assistance.*

3. Approximately a third of Trainees will establish a close personal relationship with their mentors.

Therefore a mentor scheme coordinator should not be concerned if only a small proportion of Trainees embrace the mentor-Trainee relationship. This is typical of most mentor schemes and should not be interpreted as a reason to abandon the scheme. Having stated this, an important part of a mentor system is to reduce the number of Trainees in the first group. Although this group may contain Trainees who are extremely self sufficient or successfully independent, it usually also contains a high proportion of Trainees who have chosen to minimise their part in departmental life, who are reserved or easily intimidated. A greater proportion of such Trainees encounter difficulty during their training and are hence those with whom an effective mentoring relationship would be of greatest benefit.

Implementing and coordinating a mentoring scheme requires enthusiasm and energy. A coordinator should be appointed who is in a position to be able to invite suitable staff to become mentors, as well as to gain the support and recognition of the department and hospital. It is important that the coordinator be prepared to supply mentors with the information they will require as well as be able to act as a mentoring resource.

Needless to say, for a mentoring program to be successful it is desirable that administrative assistance be provided to the coordinator. In addition to secretarial support to compile information for Trainees and mentors as well as publicising the aims and benefits of the mentoring scheme, this assistance should serve to filter enquires from both Trainees and mentors. Coordinators may also find it useful to host informal meetings with staff as a basis for staff development programs. These are excellent training opportunities as well as being useful vehicles to discuss, evaluate and offer feedback. Such staff development is always important, but it is essential for novice mentors and in the early stages of establishing a mentoring program. The coordinator should also establish effective communication procedures for two-way exchange of information between the coordinator, mentors and Trainees.

## **2.12 WELFARE OF ICM SPECIALISTS**

The welfare of all medical personnel is an important consideration for those in medical practice. This includes Trainees and senior staff.

Possible strategies to support welfare of staff:

- **Seminars**

Organise regular (annual or bi-annual) briefing sessions on welfare issues in each region, strongly encouraging attendance by Trainees, as well as senior staff, SOTs and other interested colleagues.

- **Welfare Strategies**

Alert all staff members to welfare issues. Provide Welfare Group information for all members of the department. Substance abuse recognition is of great importance. Also refer to the Policy Document IC-5 *Guidelines on the Health of Specialists and Trainees*.

- **Resources**

Maintain a list of local welfare resource personnel and helping organisations, including DHAS, Lifeline, Drug and Alcohol bodies. Consider establishing a formal link with a “liaison” psychiatrist, and/or enrol in an Employee Assistance Program (EAP). A person could be identified within each department to develop this list and establish these links.

- **Crises**

Amongst the tasks of the Director or the SOT should be to ensure the provision of help for staff involved with unexpected bad patient outcomes, or other major patient or staff mishap. If necessary, ensure debriefing sessions for these staff.

- **Department Meetings**

Ensure regular discussion of welfare and organisational issues (with input from appropriate experts), as well as professional matters. Cohesion amongst staff and good morale is worth all the hard work necessary.

*A united department  
is a strong  
department.*

## 2.13 TRAINEES WITH DIFFICULTIES

*The primary focus should always be overcoming the difficulty.*

SOTs should promptly advise a Trainee of any perceived shortcoming(s). The Trainee should be given the opportunity to explain the problem. At the very least, this will clarify the situation for both Trainee and SOT and will often be sufficient to overcome the difficulty. The primary focus should always be to overcome any difficulty in a supportive, constructive and collaborative manner. Difficulties encountered by Trainees include difficulties with examinations, clinical performance below expectation, personal or family problems, personality traits and, rarely, substance abuse.

*Trainees should be kept aware of what is expected of them at each stage in their training.*

Once a difficulty has been identified a Trainee should be asked how they view their own performance and progress. It is important for the Trainee to be kept aware of what is expected of them at each stage in their training. Trainee explanation should be sought with a view to offering assistance or access to resources to assist the Trainee. Under some circumstances, both the SOT and Trainee should consider having an independent person present during discussions. Formal or informal advice is an important component of Trainee guidance. Early and effective advice can play an invaluable role in the successful professional development of a Trainee. Most Trainees will need advice at some time during their training, though some may need more than others. Possible sources of advice include:

*Sources of advice for Trainees.*

- Supervisor of Training.
- A mentor.
- Director or other staff member in the department.
- A spouse, partner or family member.

*Professional counseling may be necessary.*

It may be appropriate for the Trainee to be advised to seek professional counselling. Sources may include:

- The Trainee's General Practitioner.
- An appropriate medical specialist.
- A psychologist or psychiatrist.
- A cleric or other religious office holder.
- A member of the Doctors' Health Advisory Service.
- A member of an Alcohol and Drug Dependency Agency.
- A medical careers advisor.

Trainees who encounter difficulty in clinical or academic areas will usually benefit from specific remedial learning experiences focussed upon the area(s) of difficulty. It may be appropriate for either the SOT or Head of Department to arrange specific learning experiences for Trainees. These may be arranged as one-on-one tuition for a Trainee or as group learning for several Trainees. Difficulties that can be readily addressed in this way may include the acquisition of definite clinical skills, interpersonal skills development, examination presentation, viva practice, etc. It is important for the Trainee to be made aware that they have a shared responsibility, and a vested interest, in making these experiences effective.

*SOTs should maintain permanent records of discussions with Trainees.*

*Warnings should be acknowledged in writing by the Trainee.*

*Possible options for a Trainee who has made unsatisfactory progress.*

*Educational psychologists may be able to help candidates who fail examinations.*

- **Documentary Records**

The SOT should maintain permanent records of all significant or planned discussions held with the Trainee. These records should include the date and time of discussions, the names and positions of those present, the topics discussed and the views expressed by all those involved. Special note should be made of any warnings regarding loss of accredited training. Those warnings must be understood and acknowledged in writing by the Trainee. Should the Trainee fail to accept or acknowledge a warning, then this may be sufficient grounds for initiating a disciplinary process. It is important to note, that where disciplinary processes are required, that the SOT should quickly refer this to the Director so that formal HR processes can be followed.

- **Unsatisfactory Progress**

If, despite counselling and remedial resources, the performance of a Trainee does not improve, the SOT and Head of Department should discuss possible options. Further advice may be sought from the College by contacting the Training Department. It is important to observe processes of procedural fairness so that the Trainee is formally notified of steps that may be taken. The SOT must advise the College of any action that alters the training status of a Trainee.

Possible options for the Trainee may include:

- A further period of specified training with special assistance and review of progress.
- A transfer to a non-training post with the possibility of reinstatement to a training position when specified conditions have been met (for example, a pass in the Primary Examination).
- Leave of absence to be followed by a period of specified training.
- A career change, on a temporary or permanent basis.

Disciplinary action in respect of employment or medical registration is a matter for the employer or the relevant Medical Board if there is evidence of serious breaches of care. In some situations (e.g. evidence of opiate misuse) it may be appropriate (or required) for the Head of Department to report the matter to the Medical Board or Medical Council. Any disciplinary action (especially dismissal) requires due process to be followed. Human Resources Departments should be consulted for advice on employment matters.

- **Difficulties with Examinations**

The Primary Examination will be the first major hurdle encountered by many Trainees. The Trainee who experiences significant problems with examinations may benefit from counselling. Educational psychologists can often assist with the coaching of Trainees in matters such as optimising performance in a stressful situation in which there is a

perceived “power imbalance” between candidate and examiner. As well, coaching in techniques for the succinct verbal presentation of factual information can be useful for many Trainees. Any Trainee who has failed the Primary Examination on a second presentation probably needs help with their approach to the examination.

The same general comments are also true for the Final Examination although the number of Trainees who have not passed after a second attempt is relatively small. Assistance with presentation skills may be of value. Resource people who are able to assist Trainees who are having problems with examinations should be identified. It will often be the task of the SOT to initiate this help.

## 2.14 OTHER TRAINING ISSUES

- **Procedure for Appeals**

Trainees have the right to appeal to the Board about administrative decisions taken by the College in respect of their training. A complaint about training decisions should be referred to the Censor in the first instance who may refer it to the Training Committee. Alternatively any matter can be discussed with the Chief Executive Officer CICM.

- **Family Needs**

A significant number of Trainees seek help with the planning of parental leave – particularly when the need arises during the later stages of training. The College attitude to this leave is that it will be as flexible as is possible within the regulations governing training and will do all that it can to minimise disruptions to training. However, it is not usually possible to give prospective approval to proposals covering a full period of parental leave. On many occasions there need to be late changes to plans because of individual circumstances before and after the birth. Trainees should be encouraged to discuss their circumstances with the College as early as possible.

- **Fatigue**

The SOT has a responsibility to see that rosters for Trainees avoid unreasonable hours and impositions on the Trainees. However current Industrial Award regulations usually protect Trainees in this respect.

- **Illness**

This will be dealt with by the College on an individual basis with the intention of minimising its effect on training. SOTs should be aware of Policy Document Ex-3 *Policy on Examination Candidates Suffering from*

*Trainees may appeal to the Board of CICM about administrative decisions taken by the College in respect to their*

*Empathetic listening is an important skill for a SOT.*

*Illness, Accident or Disability.* In cases of chronic health problems, the Chief Executive Officer should be consulted.

- **Indemnity for College Activities**

All Fellows who act in good faith, and within College policies, while carrying out College duties will be indemnified for those actions. In any perceived contentious matter there must be a complete written record of the action taken and the reasons for it. It is essential that there should be early discussion with the College staff in the Training Department whenever there are potential difficulties which may involve legal action.

- **Interrupted Training**

Regulation 5.13 in the Regulations covers this issue. Note particularly the need for two years of continuing work at some stage of training. Interruption for long periods means that extra time has to be done.

- **Overseas Training Experience**

While this is not essential, it is generally to be encouraged. It is actually possible to spend up to 4 of the 6 years of specialist training in overseas posts approved by the College, but this would be unusual. For instance, if a person has an approved overseas specialist qualification, they may be admitted to the ATYs without need for time in the BTY training. In addition, one of the core ATYs may be done in a prospectively approved post overseas and this could also apply to the elective ATY. At least two years of the total program, including both BTY and ATY years, must be spent in approved posts in Australia, New Zealand, or Hong Kong. However, normally most of the training time will be spent in Australian or New Zealand posts. When a local graduate wants to spend training time overseas prospective approval must be obtained from the Censor. This should be sought well in advance of the appointment.

- **Part-Time Training**

Part-time training can now take place at any time under the rules set out in Regulation 5.12 of the College Regulations. SOTs should advise Trainees as to their options. Total effective training time is not altered. The training must comprise a minimum of 20% of the commitment of a fulltime Trainee, including both in-hours and emergency duties.

- **Research**

The College does encourage research by Trainees and may allow time spent in research to count towards training. Note that prior approval from

*Overseas experience is generally encouraged. It is strongly recommended that Trainees/SOTs discuss overseas plans with the Censor.*

*Research activities may lead to completion of the formal project, an MD, PhD, etc.*

the Censor is necessary for any significant period which alters the nature of normal clinical duties. A designated Supervisor of the research is necessary. He/she must report on the outcome of the Trainee's participation. As noted earlier, some Trainees have worked towards research degrees such as MD and PhD concurrently with their anaesthesia training.

- **Sexual Harassment**

There is no place for any behaviour towards another that is sexual or gender-based and is unwanted, unacceptable and/or offensive. SOTs are reminded of this matter because allegations from some Trainees in other Colleges have been received. In all situations, the onus is on the individual to be certain that his/her actions are acceptable to the recipient. Remember that SOTs and other senior staff are perceived as being in a position of power in comparison with Trainees. There is no wish to remove congeniality, warmth and friendship from the workplace. There should be an environment with harmony, mutual respect and productivity. The College has no formal policies in this area but there are other medical organisations, such as the Australian Medical Association and the New Zealand Medical Council, which have documents on this subject.

- **Training and Examination Fees**

These are set each year by the Board and govern the nature and payment of training fees. SOTs should be familiar with the various fees. Fees are set on the basis that activities of the College which involve Trainees should be financially self supporting. Activities such as support of SOTs, inspections of hospitals and administration of the training program are a charge against training fees.

- **Work Patterns**

The financial constraints placed on employers means that average weekly hours of work for Trainees are less than was the case a number of years ago. As well, there is a greater use of shift work to provide night hospital cover. While this may have advantages from a fatigue control perspective, it may lead to reduced supervised training opportunities. As an advocate for the Trainees, it is important that the SOT ensures a proper balance between clinical training and service duties. The guidelines in the Policy Document IC-4 *The Supervision of Vocational Trainees in Intensive Care* must be followed. Trainees must continue to have exposure to supervised experience during the day and out of hours which is appropriate to their stage of training. Trainees must not be used to maintain clinical service at the expense of that training. It is the responsibility of the SOT to advise the Hospital Accreditation Committee if work patterns change in a way which might affect Trainees adversely.

*It is important that a balance of work be maintained between clinical training and service duties.*

*The Hospital Accreditation Committee should be advised if Trainees are adversely affected by a change in work pattern.*

## **2.15 GLOSSARY**

ACEM	Australasian College for Emergency Medicine
ADAPT	Australian Donor Awareness Program
ATY	Advanced Training Year
AVT	Approved Vocational Training
BTY	Basic Training Year
CICM	College of Intensive Care Medicine
EAP	Employee Assistance Program
EMAC	Effective Management of Anaesthetic Crises
EMST	Early Management of Severe Trauma
EO	Executive Officer
EX	Examinations
FCICM	Fellow of the College of Intensive Care Medicine
FCCS	Fundamental Critical Care Support Course
FJFICM	Fellow of the Joint Faculty of Intensive Care Medicine
HAC	Hospital Accreditation Committee
HDU	High Dependency Unit
HOD	Head of Department
ICM	Intensive Care Medicine
ITA	In-Training Assessment
JFICM	Joint Faculty of Intensive Care Medicine
MCQ	Multiple Choice Question
OSCE	Objective Structured Clinical Examination
PGY	Postgraduate Year
RACP	Royal Australian College of Physicians
RACS	Royal Australasian College of Surgeons
SAQ	Short Answer Question
SOT	Supervisor of Training
T	Technical
TE	Training and Educational
TY	Training Year

### 3. USEFUL EDUCATIONAL RESOURCES

#### 3.1 PERTINENT MEDICAL EDUCATION ORGANISATIONS

Those SOTs interested in finding out more about medical education organisations are referred to the following:

- Australian and New Zealand Association for Medical Education (Aust. and NZ).  
ANZAME Membership Secretary  
c/- Dept Medical Education  
Flinders University  
GPO Box 2100  
ADELAIDE 5001  
Tel: 61 882 043 010 \* Website: [www.anzame.unsw.edu.au](http://www.anzame.unsw.edu.au)
  
- Association for Medical Education in Europe  
Centre for Medical Education  
University of Dundee  
Tay Park House  
484 Perth Road  
Dundee DD2 1LR  
United Kingdom  
Tel: 44 138 263 1953  
Fax: 44 138 2381 987 \* Website: [www.amee.org](http://www.amee.org)
  
- Association for the Study of Medical Education (Europe).  
12 Queen Street  
Edinburgh EH2 1JE  
United Kingdom  
Tel: 44 131 225 9111  
Fax: 44 131 225 9444 \* Website: [www.asme.org.uk](http://www.asme.org.uk)

#### 3.2 USEFUL MEDICAL EDUCATION JOURNALS

The following are the core medical education journals likely to be of most interest to SOTs. Some publishers list tables of contents and abstracts.

- Academic Medicine
- Journal of Medical Education
- Medical Education
- Medical Teacher
- Focus on Health Profession Education

### 3.3 WEB BASED RESOURCES

The web contains a great deal of information relevant to intensive care and medical education. The following gateways, search engines, and websites are useful resources for SOTs and Trainees.

A Gateway allows an Internet user to access specific parts of the Internet which may be of interest to them.

**Useful Medical Gateways** include:

BUBL	<a href="http://www.bubl.ac.uk">www.bubl.ac.uk</a>
Free Medical Journals	<a href="http://www.freemedicaljournals.com">www.freemedicaljournals.com</a>
GASNet	<a href="http://www.gasnet.org">www.gasnet.org</a>
Martindale's Health Science Guide	<a href="http://www.martindalecenter.com/HSGuide.html">www.martindalecenter.com/HSGuide.html</a>
Medical Matrix	<a href="http://www.medmatrix.org">www.medmatrix.org</a>
Medmark	<a href="http://www.medmark.org">www.medmark.org</a>
Medscape	<a href="http://www.medscape.com">www.medscape.com</a>
MedWeb	<a href="http://www.medweb.emory.edu/medweb">www.medweb.emory.edu/medweb</a>
Intute: Health & Life Sciences	<a href="http://www.intute.ac.uk/healthandlifesciences/omnilost.html">www.intute.ac.uk/healthandlifesciences/omnilost.html</a>

A Search Engine is a program that allows you to search for specific information on the Internet. Some search engines target all information available on the Internet and may provide you with enormous quantities of irrelevant material. By choosing a search engine related to science you may use the engine as a filter to remove a great deal of irrelevant materials from your search.

**Search Engines Specific to Science** include:

Chemie.DE	<a href="http://www.chemie.de">www.chemie.de</a>
MedScape	<a href="http://www.medscape.com">www.medscape.com</a>
Scirus	<a href="http://www.scirus.com">www.scirus.com</a>
SciSeek.com	<a href="http://www.sciseek.com">www.sciseek.com</a>

Useful Internet resources for clinical trials, databases, guidelines and electronic journals (that is, on-line journals) include:

#### **Clinical Trials**

Center Watch	<a href="http://www.centerwatch.com">www.centerwatch.com</a>
ClinicalTrials.gov	<a href="http://www.clinicaltrials.gov">www.clinicaltrials.gov</a>

#### **Databases**

EMBase	<a href="http://www.embase.com">www.embase.com</a>
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PubMed [www.ncbi.nlm.nih.gov/entrez](http://www.ncbi.nlm.nih.gov/entrez)

### Guidelines

Cochrane Reviews [www.update-software.com/cochrane/cochrane-frame.html](http://www.update-software.com/cochrane/cochrane-frame.html)  
EMJA Clinical Guidelines [www.mja.com.au](http://www.mja.com.au)  
National Guideline Clearinghouse [www.guideline.gov](http://www.guideline.gov)

### eJournals

Academic Medicine Online [www.academicmedicine.org](http://www.academicmedicine.org)  
British Journal of Anaesthesia [bj.oxfordjournals.org/](http://bj.oxfordjournals.org/)  
British Medical Journal [www.bmj.com](http://www.bmj.com)  
Medical Education On-Line [www.mededuc.com/](http://www.mededuc.com/)  
NetPrints [clinmed.netprints.org](http://clinmed.netprints.org)  
BioMed Central (includes PubMed Central) [www.biomedcentral.com](http://www.biomedcentral.com)  
MedBioWorld [www.sciencekomm.at](http://www.sciencekomm.at)  
The New England Journal of Medicine [content.nejm.org](http://content.nejm.org)

## 3.4 LIST OF RECOMMENDED TEXTS FOR THE BASIC SCIENCES IN ANAESTHESIA AND INTENSIVE CARE

The most recent version of the following is the recommended text to aid in preparation for the ANZCA Primary Examination.

### General Text

*Anesthesia* ed. by R D Miller – 6th ed. – New York: Churchill Livingstone, 2004.

*International Practice of Anaesthesia* ed. by Cedric Prys-Roberts and Burnell R Brown – 6th ed. - Oxford: Butterworth Heinemann, 1996.

### General Physiology

*Textbook of Medical Physiology*/A C Guyton & J E Hall – 11th ed. – Philadelphia: W B Saunders, 2005.

*Review of Medical Physiology*/W F Ganong – 22nd ed. – Stamford, Connect: Appleton & Lange, 2005.

*Best and Taylor's Physiological Basis of Medical Practice: a university text in applied physiology*/C H Best and N B Taylor – 12th ed. – Baltimore: William and Wilkins, 1990.

*Scientific Foundations in Anaesthesia*/C Scurr, S Feldman, & N Soni – 4th ed., – London: William Heinemann, 1990.

*Lecture notes on Human Physiology*/ed. by J J Bray et. al. – 5th ed. – Oxford: Blackwell Science, 2006.

### **Respiratory**

*Respiratory Physiology: The Essentials*/J B West – 7th ed. - Baltimore: Williams & Wilkins, 2005.

*Nunn's Applied Respiratory Physiology*/A B Lumb – 6th ed. – Oxford: Butterworth Heinemann, 2005.

### **Cardiovascular**

*Cardiovascular Physiology*/ M N Levy and A J Pappano– 9th ed. – St Louis: Mosby, 2007.

### **Clinical Measurement**

*Basic Physics and Measurement in Anaesthesia*/P D Davis and G N C Kenny – 5th ed. – Edinburgh: Butterworth-Heinemann, 2002.

*Clinical Monitoring: Practical Applications for Anesthesia and Critical Care*ed. by C L Lake; R L Hines & C D Blitt – Philadelphia: WB Saunders, 2001.

*Physics for the Anaesthetist*/W W Mushin & P L Jones – 4th ed. – Oxford: Blackwell, 1987.

### **General Pharmacology Books**

*Pharmacology*/H P Rang, J M Ritter, M M Dale – 5th ed – Edinburgh: Churchill-Livingstone, 2003.

*Goodman and Gilman's The Pharmacological Basis of Therapeutics*/ed by J.G. Hardman et. al. – 11th ed. – New York: McGraw-Hill, 2006.

OR

*Basic and Clinical Pharmacology*/ed. by B K Katzung – 10th ed. – New York: Lange Medical 2007.

### **Anaesthetic Pharmacology**

*The Pharmacologic Basis of Anesthesiology: Basic Science and Practical Applications*/ed. by T.A. Bowdle; A. Horita & E.D. Kharasch – New York: Churchill-Livingstone, 1994.

*Textbook of Intravenous Anaesthesia*/ed. by P.F. White – Baltimore: Williams & Williams, 1997.

*Pharmacokinetics for Anaesthesia*/C J Hull –Oxford: Butterworth-Heinemann, 1991.

*Pharmacology and Physiology in Anesthetic Practice*/R K Stoelting – 4th ed. – Philadelphia: Lippincott-Raven, 2006.

*Neural Blockade: In Clinical Anesthesia and Management of Pain*/ed. by M J Cousins and P O Bridenbaugh – 3rd ed. – Philadelphia: Lippincott, 1998.

### **Statistics**

*Basic and Clinical Biostatistics*/B Dawson-Saunders and R G Trapp – 4th ed. – California: Lange, 2004.

OR

*Primer of Biostatistics*/Stanton A Glantz – 6th ed. – New York: McGraw Hill, 2005.

## **3.5 SUGGESTED INTENSIVE CARE REFERENCE LIST**

This is an abbreviated guide. Trainees are advised to read widely.

### **Textbooks**

*Oh's Intensive Care Manual*/A D Bersten, N Soni & T E Oh [ed] – 5th ed. – Edinburgh: Butterworth Heinemann, 2003.

*Clinical Intensive Care & Acute Medicine*/K Hillman & G Bishop – 2nd ed. - Melbourne: Cambridge University Press, 2004.

*Synopsis of Intensive Care Medicine*/L I G Worthley & N Matthews – Edinburgh: Churchill Livingstone, 1994.

*Critical Care Nursing: Australian Perspective*/J Romanini & J Daly – Sydney: W.B. Saunders, 1994.

*Clinical Examination: A Systematic Guide to Physical Diagnosis*/N Talley & S O'Connor – 5th ed. – Sydney: MacLennan & Petty, 2006.

*Examination Medicine: A Guide to Physician Training*/N Talley & S O'Connor – 4th ed. – Sydney: MacLennan & Petty, 2001.

### **Intensive Care Reference Books**

*Critical Care*/ed. by J M Civetta, R W Taylor & R R Kirby [ed] – 4th ed. – Philadelphia: Lippincott-Raven, 2006.

*Textbook of Critical Care*/M A Shoemaker, S M Ayres, A Grenvik & P R Holbrook [ed] – 4th ed. – Philadelphia: W.B. Saunders, 2005.

*Principles of Critical Care*/ed. by J B Hall, G A Schmidt & L D H Wood [ed] – 3rd ed. – New York: McGraw-Hill, 2005.

*Critical Care Medicine: Principles of Diagnosis and Management in the Adult*/J E Parillo & R P Dellinger – 2nd ed. – St Louis: Mosby, 2001.

*Principles and Practice of Medical Intensive Care*/R W Carlson & M A Geheb [ed] – Philadelphia: W.B. Saunders, 1993.

*Irwin and Rippe's Intensive Care Medicine*/R S Irwin & J M Rippe [ed] – 5th ed. – Philadelphia: Lippincott Williams and Wilkins, 2003.

*The ICU Book*/P L Marino – 3rd ed. – Baltimore: Williams and Wilkins, 2007.

*Current Critical Care Diagnosis and Treatment*/F S Bonegard & D Y Sue [ed] – 2nd ed. – Stamford, CT: Appleton & Lange, 2002.

Trainees are advised to read the intensive care periodicals available in the College Library and scan the general journals for relevant articles (e.g. JAMA, NEJM, MJA) see Bulletin August 1997.

## **Extended Reference List**

### **General Medicine**

*Harrison's Principles of Internal Medicine Vol. 1 & 2*/E Braunwald et al [ed] – 15th ed. – New York: McGraw-Hill, 2001.

*Oxford Textbook of Medicine Vol 1, 2 & 3*/D J Weatherall, J G G Ledingham & D A Warrell [ed] – 4th ed. – Oxford: Oxford University Press, 2003.

### **General Surgery**

*Oxford Textbook of Surgery Vol I & II*/P J Morris & R A Malt – 2nd ed. – Oxford: Oxford Medical Publications, 2000.

### **Specialty Medicine & Surgery – Cardiology**

*Heart Disease: A Textbook of Cardiovascular Medicine*/E Braunwald [ed] – 6th ed. – Philadelphia: W.B. Saunders, 2001.

*Marriott's Practical Electrocardiography*/G S Wagner [ed] – 10th ed. – Philadelphia: Lippincott Williams & Wilkins, 2001.

*Cardiac Arrest. The Science and Practice of Resuscitation*/N Paradis, H Halperin & R Novak – Williams and Wilkins, 1996 – Out of Print.

### **Specialty Medicine & Surgery – Respiratory**

*Chest Medicine, Essentials of Pulmonary and Critical Care Medicine*/R B George, R W Light, M A Mathay & R A Mathay [ed.] – 5th ed. – Philadelphia: Lippincott Williams & Wilkins, 2005.

*Respiratory Medicine*/G J Gibson & R A L Brewis et al [ed] – 3rd ed. – London: Saunders, 2003.

### **Specialty Medicine & Surgery – Renal**

*Renal & Electrolyte Disorders*/ed by R W Schrier – 6th ed. – Philadelphia: Lippincott Williams & Wilkins, 2003.

*Maxwell and Kleeman's clinical disorders of fluid and electrolyte metabolism*/ed by R G Narins [ed] – 5th ed. – New York: McGraw Hill, 1994.

*Critical Care Nephrology*/ed by C Ronco & R Bellomo [ed] – Dordrecht: Kluwer Academic Publishers, 1998.

*Textbook of Renal Disease*/J A Whitworth & J R Lawrence [ed] – 2nd ed. – Edinburgh: Churchill Livingstone, 1994.

### **Haematology, Immunology**

*The Medical Management of AIDS*/ed by M A Sande & P A Volberding – 6th ed. – Philadelphia: Saunders, 1999.

*Clinical Bone Marrow and Blood Stem Cell Transplantation*/ed by K Atkinson – 3rd ed. – Cambridge: Cambridge University Press, 2004.

### **Neurology & Neurosurgery**

*Merrit's Neurology*/ed by L P Rowland [ed] – 11th ed. – Philadelphia: Lippincott Williams & Wilkins, 2005.

*The Diagnosis of Stupor and Coma*/F Plum & J B Posner – 4th ed. – New York: Oxford University Press, 2007.

*Handbook of Neurosurgery*/M S Greenberg – 5th ed. – New York: Thieme Medical Publishers, 2001.

*An Introduction to Neurosurgery*/A H Kaye – 5th ed. – New York: Churchill Livingstone, 1994 – Out of Print.

*Essential Neurosurgery*/A H Kaye – 3rd ed. – Malden Mass: Blackwell, 2005.

### **Liver and Biliary System**

*Diseases of the Liver and Biliary System*/ed by S Sherlock & J Dooley – 11th ed. – Oxford: Blackwell Scientific Publications, 2002.

*The Liver*/F H Hawker – London: Saunders, 1993 – Out of Print.

### **Paediatrics**

*Handbook of Pediatric Intensive Care*/M C Rogers & M A Helfaer – 3rd ed. – Baltimore: Williams & Wilkins, 1999.

*Nelson Textbook of Pediatrics*/ed by R E Behrman, R M Kliegman, & H B Jenson [ed] – 17th ed. – Philadelphia: Saunders, 2004.

*Paediatric Anaesthesia*/ed by E Sumner & D J Hatch – 2nd ed. – London: Arnold, 1999.

### **Infectious Diseases and Antibiotics**

*Mandell, Douglas and Bennett's Principles and Practice of Infectious Diseases. Vol 1 & 2*/G L Mandell, J E Bennett & R Dolin [ed] – 6th ed. – Philadelphia: Elsevier Churchill Livingstone, 2005.

*Reese and Betts' a Practical Approach to Infectious Diseases*/R E Reese & R F Betts – 5th ed. – Philadelphia: Lippincott Williams & Wilkins, 2003.

*The Use of Antibiotics: A Clinical Review of Antibacterial, Antifungal, and Antiviral Drugs*/A Kucers, S Crowe, M L Grayson & J Hoy – 5th ed. – Oxford: Butterworth-Heinemann, 1997.

### **Obstetrics**

*Current Obstetric and Gynecologic Diagnosis & Treatment*/A H DeCherney & L Nathan – 10th ed. – New York: Lang Medical Books/McGraw Hill, 2005.

*Medical Disorders in Obstetric Practice*/ed by M DeSwiet – 4th ed. – Oxford: Blackwell Science, 2002.

### **Dermatology**

*Dermatology: an Illustrated Guide*/L Fry – 3rd ed. – London: Butterworths, 1984 – Out of Print.

*Clinical Dermatology Illustrated: A Regional Approach*/J R T Reeves & H I Maibach – 3rd ed. – Sydney: McLennan & Petty, 1998.

### **Psychiatry and Ethics**

*Textbook of Psychiatry*/ed by P J V Beumont & R B Hampshire – Melbourne: Blackwell Science, 1989.

*Ethics and the Law in Intensive Care*/ed by N Pace & S A M McLean – Oxford: Oxford University Press, 1996.

### **Techniques, Monitoring and Equipment**

*Techniques in Bedside Hemodynamic Monitoring*/E K Daily & J S Shroeder – 5th ed. – St Louis: Mosby, 1994.

*Principles of Measurement and Monitoring in Anaesthesia and Intensive Care*/M K Sykes, M D Vickers & C J Hull – 3rd ed. – London: Blackwell Scientific Publications, 1991.

*Principles and Practice of Mechanical Ventilation*/ed by M J Tobin – 2nd ed. - New York: McGraw-Hill, 2006.

*Difficulties in Tracheal Intubation*/ed by I P Latta & R S Vaughan – 2nd ed. – London: W.B. Saunders, 1997.

*Scientific Foundations of Anaesthesia: The Basis of Intensive Care*/ed by C Scurr, S Feldman & N Soni [ed] – 4th ed. – Oxford: Heinmann Medical Books, 1990.

*Equipment for Anaesthesia and Intensive Care*/W J Russell – 2nd ed. - Adelaide: WJ Russell, 1997.

### **Nutrition**

*Nutrition in Critical Care*/ed by G P Zaloga – St Louis: Mosby, 1994.  
*Parenteral and Enteral Nutrition: A Practical Guide*/G D Phillips & C L Odgers – 3rd ed. – Edinburgh: Churchill Livingstone, 1986.

### **Investigations**

*Interpretation of Diagnostic Tests*/J Wallach – 8th ed. – Philadelphia: Lippincott Williams & Wilkins, 2007.

### **Pharmacology and Poisoning**

*Goodman and Gilman's the Pharmacological Basis of Therapeutics*/J G Hardman & L E Limbird [ed] – 11th ed. – New York: McGraw Hill, 2006.

*Meyler's Side Effects of Drugs: An Encyclopedia of Adverse Reactions and Interactions*/ed by M N G Dukes & J K Aronson [ed] – 14th ed. – Amsterdam: Elsevier, 2000.

*Clinical Management of Poisoning and Drug Overdose*/ed by L M Haddad & J F Winchester – 3rd ed. – Philadelphia: Saunders, 1998.

*Handbook of Medical Toxicology*/ed by P Viccellio – Boston: Little, Brown and Co., 1993.

*Toxic Plants and Animals. A Guide for Australia*/J Covacevich, P Davie & J Pearn [ed] – Brisbane: Queensland Museum, 1987 – Out of Print.

### Statistics

*Statistical Methods in Medical Research*/P Armitage, G Berry & J N S Matthews – 4th ed. – Oxford: Blackwell Science, 2002.

### Anatomy

*Anatomy for Anaesthetists*/H Ellis & S Feldman – 8th ed. – Carlton, Vic: Blackwell Scientific, 2004.

## 3.6 MEDICAL EDUCATION REFERENCES

Those SOTs interested in further developing their knowledge of medical education may be interested in the following references.

- Abrahamson S, Baron J, Elstein AS, Hammond WP, Holzman GB, Marlow B, Taggart MS, Schilkin J. Continuing medical education for life; Eight principles. *Academic Medicine*, 1999; 74; 1288-1294
- Andriole DA, Evans SRT, Foy HM, Atnip RG, Mancino AT. Can a one-day workshop alter surgeons' teaching practices? *The American Journal of Surgery*, 1998; 175 (6); 518-520
- Chumley-Jones HS, Dobbie A, Alford CL. Web-based learning: Sound educational method or hype? A review of the evaluation literature. *Academic Medicine*, 2002; 77; S86-S93
- Devitt P, Palmer E. Computer-aided learning: An overvalued educational resource? *Medical Education*, 1999; 33; 136-139
- Dolmans DHJM, Wolfhagen IHAP, Essed GGM, Scherpbier AJJA, van der Vleuten CPM. The impacts of supervision, patient mix, and numbers of students on the effectiveness of clinical rotations. *Academic Medicine*, 2002; 77(4); 332-335
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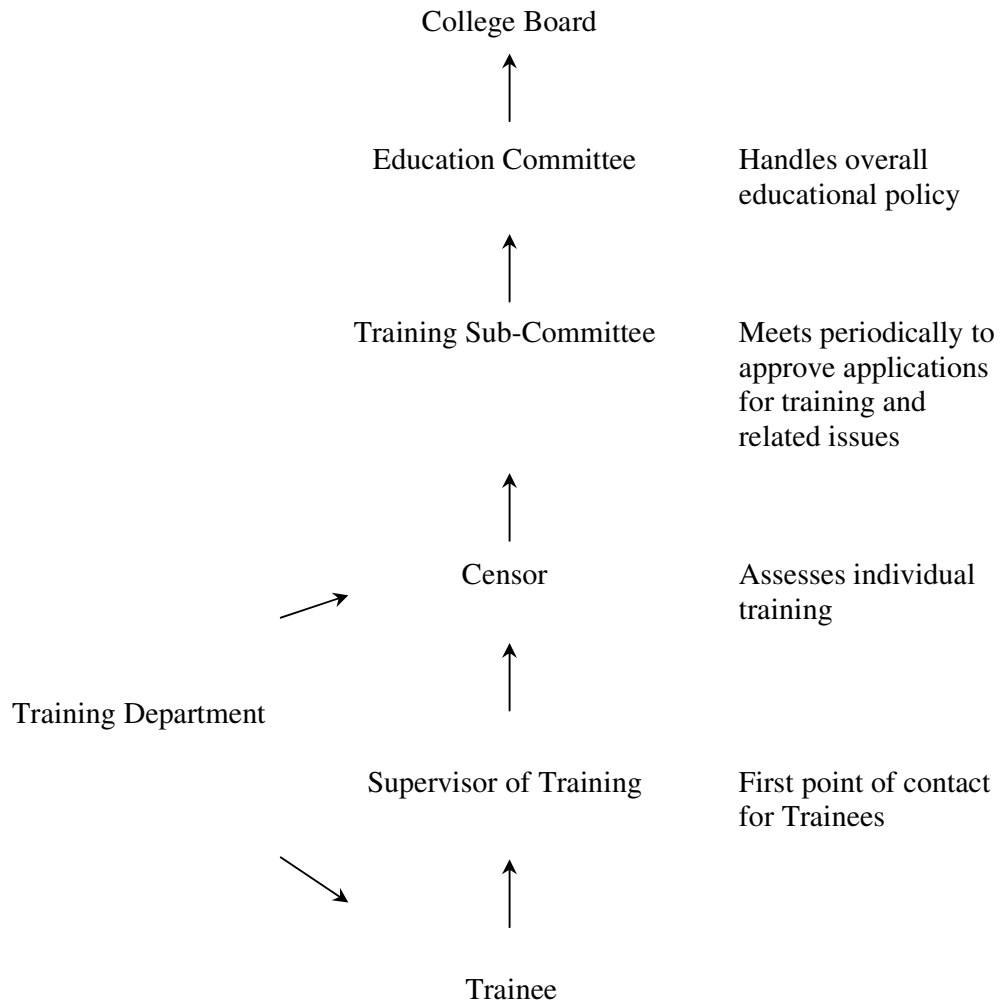
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## 4. ORGANISATIONAL TRAINING PATHWAY AND USEFUL CONTACTS

### 4.1 ORGANISATIONAL TRAINING PATHWAY



## 4.2 USEFUL CONTACTS

*Potentially useful contacts for SOTs.*

### **CICM Headquarters**

College of Intensive Care Medicine  
Suite 1.01, 168 Greville Street  
PRAHRAN VIC 3181  
Tel: 03 9530 2861  
Fax: 03 9530 2862  
Email: [cicm@cicm.org.au](mailto:cicm@cicm.org.au)

Chief Executive Officer  
Mr. Phil Hart

### **Training and Examinations**

Training Department  
College of Intensive Care Medicine  
Suite 1.01, 168 Greville Street  
PRAHRAN VIC 3181  
Tel: 03 9530 2861  
Fax: 03 9530 2862  
Email: [cicm@cicm.org.au](mailto:cicm@cicm.org.au)

Co-ordinator, Training and Examinations  
Mr. Daniel Angelico

The following can be contacted c/- CICM office:

Dr. Peter Morley	Education Officer and Chair, Education Committee
Dr. Ross Freebairn	Censor and Vice President, CICM

### **Regional/National Committees**

Supervisors may need to liaise with members of the College Regional Committee in their state or region with regards to local training issues. Trainees can contact the Training Department at the College to obtain specific contact details.

## 5. LIST OF RESOURCES

The following is a list of resources, forms and information that Supervisors can access via the College Website. [www.cicm.org.au/Training](http://www.cicm.org.au/Training)

1. Regulations relating to Training and Examinations (5) and Reconsideration and Appeals (12 & 13)
2. College Policies and Resource Documents (IC- Professional, T – Education and Training, and Ex – Examination )
3. Guidelines for the Selection of Trainees (T-1)
4. Objectives of Basic Training and Competencies (T-5)
5. Objectives of Advanced Training and Competencies (T-6)
6. Objectives of Training: the Medical Term (T-7)
7. Objectives of Training: the Anaesthesia Term (T-8)
8. Syllabus for the Basic Sciences in Intensive Care Medicine (T-4)
9. Primary Examination Notes to Candidates (Ex-1)
10. Hot Case Assessment Form
11. General Fellowship Examination Notes to Candidates (Ex-2)
12. Candidates Suffering from Illness, Accident or Disability (Ex- 3)
13. Formal Project Requirements (T-9)
14. Supervisor’s Project Evaluation Report
15. Guidelines for the In-Training Assessment of Trainees in Intensive Care Medicine (T-12)
16. ITA Goals Form
17. In-Training Assessment Form – Elective Training
18. In-Training Assessment Form – Clinical Internal Medicine Training
19. In-Training Assessment Form – Clinical Anaesthesia Training
20. In-Training Assessment Form – Core Intensive Care Training – Year 1
21. In-Training Assessment Form – Core Intensive Care Training – Year 2: First 6 Months
22. In-Training Assessment Form – Core Intensive Care Training – Year 2: Final 6 Months

23. In-Training Assessment Form – Final In-Training Assessment
24. ANZCA Educational Module: Effective Studying for Trainees (T-31)
25. CICM Educational Module: Giving Feedback to Trainees (T-32)
26. ANZCA Educational Module: Trainees Experiencing Difficulty (T-33)



