



FLINDERS
Ophthalmology

Retina Fellowship 2012

Curriculum

Flinders Medical Centre

Supervisors

Dr Stewart Lake
FRANZCO, FRCOphth

Dr Niladri Saha
FRANZCO, FRCOphth

Curriculum Statement

The curriculum for subspecialty (fellowship) training in retina describes the outcome of 1 year's training leading to a certificate at the end of the year confirming completion of the training period.

The core requirements are described in a series of learning outcomes. These are derived from what a Retinal Specialist (consultant), as a health care professional in Australia, is able to do and how they approach their practice. The learning outcomes are not exhaustive and it assumed that the current Fellow already possesses the skills that pertain to the General Ophthalmologist.

A Retinal Specialist in Australia is able to assess a patient clinically, order and interpret appropriate investigations and then manage the patient based upon an understanding of basic and clinical sciences. He/she is competent in a range of practical and surgical skills. He/she is also able to communicate effectively with a patient and other individuals important in that patient's care and practise with appropriate attitudes and ethics.

As a healthcare professional working in a multidisciplinary team a Retinal Specialist is aware of the doctor's role within the health and social services and is able to manage information effectively, efficiently and confidentially. He/she exercises appropriate decision making skills, clinical reasoning and judgement and is able to engage in health promotion, disease prevention and clinical teaching.

A Retinal Specialist is aware of his/her limitations in terms of knowledge, experience and skills and always practises within these limits. He/she is prepared to refer patients to other practitioners where appropriate. He/she has an aptitude for, and commitment to, continuing professional and personal development.

Structure of the curriculum

A. Domains of Clinical Practice

1. What the Retinal Specialist is able to do
2. How the Retinal Specialist approaches their practice
3. The Retinal Specialist as a professional

B. Programme Delivery

C. Assessment

A. Domains of clinical practice

A1. What the Retinal Specialist is able to do

A1i. Clinical assessment

- Take a focussed clinical history
- Perform an examination of the posterior pole to an advanced standard using wide field and high magnification lenses at the slit lamp
- Perform an examination of the retinal periphery, ora serrata and pars plana using the 3 mirror contact lens, and a dynamic examination with the indirect ophthalmoscope
- Perform an examination of the vitreous
- Assess a gas or, oil filled eye
- Perform an anterior segment examination with particular reference to retinal disease and trauma
- Perform a focussed general examination taking into account the associations between systemic and retinal disease
- Formulate a differential diagnosis

A1ii. Patient investigations: to order and evaluate appropriate special investigations

- Ocular angiography
- Ocular ultrasound
- Optical coherence tomography
- Automated perimetry
- Biometry
- Blood biochemistry
- Haematology
- Pathology
- Microbiology
- Immunology

A1iii. Patient management

- To formulate and agree with the patient a management plan based upon clinical assessment and investigations with particular reference to:
 - management of retinal detachment by vitrectomy or scleral buckling
 - management of macular hole, epiretinal membrane and other surgical retina problems
 - management of Age-Related Macular Degeneration
 - management of diabetic eye disease and vascular retinal disease
 - management of uveitis

- To make appropriate use of triage and prioritise or refer patients when indicated
- To prescribe and administer appropriate local and systemic therapy
- To select appropriate cases for surgery
- To prepare patients for surgery
- To assess the progress of disease and response to treatment or surgery
- To recognise and manage local and systemic complications of treatment
- To manage anaphylaxis, and cardiopulmonary resuscitation (basic life support)
- To refer patients, when appropriate, for provision of low vision aids and rehabilitation services for the visually impaired
- To involve, and make appropriate referrals to, medical and non-medical colleagues
- To recognise and act upon ocular findings and treatments that have implications for the general health and well-being of patients
- To use spectacle lenses and prisms when indicated
- To use contact lenses when indicated
- To select patients for laser treatment (photodynamic therapy, green laser) when indicated
- To understand and promote the importance of diet and nutrition in ophthalmic disease

A1iv. Practical skills

- Recognise and assist with the special needs of people with visual impairment in the clinical environment
- Administer periocular and intraocular drugs
- Perform venesection, cannulation and set-up intravenous infusions
- Achieve appropriate local anaesthesia, and recognise the possible complications
- Use diathermy appropriately and safely
- Use cryotherapy appropriately and safely
- Perform anterior chamber paracentesis
- Remove sutures from eye and adnexae
- Perform ocular ultrasound
- Demonstrate lid hygiene to a patient
- Perform anterior chamber and vitreous sampling
- Take samples for blood culture
- Perform the correct hand hygiene technique
- Carry out irrigation and debridement of ocular contaminants
- Prepare a biopsy sample for subsequent histopathological and microbiological assessment

A1v. Surgical skills

To perform surgical and laser skills, in particular:

- Demonstrate a wide range of basic surgical skills
- Use the operating microscope with particular reference to retinal surgery
- Use aseptic surgical technique
- Perform small incision cataract surgery
- Perform 23G and 20G vitrectomy
- Achieve PVD induction
- Perform an internal search and identify relevant pathology
- Use endodiathermy
- Perform a retinotomy
- Perform a retinectomy
- Drain subretinal fluid with or without retinotomy or perfluorocarbon liquid
- Be familiar with the applications and use of perfluorocarbon liquid
- Be familiar with the applications and use of silicone oil
- Be familiar with the applications and use of intraocular gas (Air, SF₆, C₃F₈)
- Use retinal dyes
- Perform epiretinal membrane peeling
- Perform internal limiting membrane peel
- Manage the dropped nucleus and implant an appropriate intraocular lens
- Perform retinopexy with endolaser
- Perform retinopexy with cryotherapy
- Perform retinopexy with indirect laser
- Manage the lens in the context of posterior segment surgery
- Perform scleral buckling procedures
- Perform encirclage
- Apply appropriate laser for the management of the lens capsule
- Apply appropriate laser for the management of raised IOP
- Apply appropriate laser for the management of medical retinal problems including
- Perform panretinal photocoagulation using the slit lamp laser
- Perform panretinal photocoagulation using the indirect laser
- Perform retinopexy using the slit lamp laser
- Perform retinopexy using the indirect laser
- Perform laser ablation
- Be aware of treatment with Photodynamic therapy

A1vi. Health promotion and disease prevention

- Promote the value, and assist in the organisation, of screening for eye disease
- Prevent contagion and cross infection
- Notify and facilitate contact tracing of communicable diseases
- Promote issues of injury prevention, especially in regard to protective eyewear
- Implement risk reduction strategies relating to ophthalmic and relevant systemic diseases.
- Take appropriate care of laser and diagnostic contact lenses
- Understand the implications of investigations and therapeutics during pregnancy
- Make recommendations for bone protection

A1vii. Communication

- Establish a good rapport with patients and relatives
- Communicate effectively and sensitively with patients, relatives and carers, particularly with regard to active listening, questioning and conclusion
- Deliver information
- Advise patients and their relatives or carers of the availability of sources of information
- Obtain valid consent from the patient paying particular attention to the patient's level of understanding and mental state (and also that of the parents, relatives or carers when appropriate)
- Communicate potentially upsetting information in an appropriate manner ('breaking bad news')
- Communicate appropriately when there are language and other potential barriers to effective communication
- Aware of the importance of non-verbal communication
- Respond to complaints
- Be able to communicate succinctly and effectively with other professionals
- Keep clinical records
- Write and dictate clearly and effectively
- Prepare an operating list
- Ensure adequate intra-departmental communication to ensure efficient service provision especially with respect to planned and un-planned leave

A1viii. Information handling

- Use appropriate learning resources, including electronic reference source
- Use appropriate paper-based and electronic records, databases and statistical packages
- Use professional guidelines appropriately
- Use appropriate IT and email facilities
- Manage patient referrals
- Be actively involved in national databases

A2. How the retinal specialist approaches their practice

A2i. Basic and clinical sciences

Approach your practice with an understanding of basic and clinical sciences, in particular

- Anatomy
- Physiology
- Biochemistry and cell biology
- Pathology
- Growth, development and senescence
- Optics and medical physics
- Clinical ophthalmology
- Clinical therapeutics
- Basic general medicine and surgery
- Clinical psychology
- Medical sociology
- The safe use of ophthalmic lasers
- Clinical epidemiology and evidence based medicine
- Instrument technology
- Biostatistics
- Clinical genetics
- Health economics

A2ii. Attitudes, ethics and responsibilities

- Compassionate approach to patient care
- Ethical approach to clinical decision making that recognises and respects patient autonomy.
- Considerate approach to clinical practice, in particular to patients with disabilities and visual impairment
- Empathy with patients with eye problems and in the recognition of the impact of visual impairment on the patient and their relatives or carers
- Respect for patient confidentiality and appropriate disclosure of patient information
- Able to recognise and work within the limits of personal knowledge, skills and understanding (reflective practice)
- Prepared to seek help and advice when appropriate
- Prepared to seek feedback from all colleagues in the multi professional team
- Ethical approach to clinical care, especially in relation to the appropriate use of resources, clinical research and issues of equality and diversity.
- Aware of issues of probity and possible conflict of interest in professional practice
- Aware of the responsibilities of a Retinal Specialist in child protection

- Able to manage time effectively and deal with stress

A2iii. Clinical reasoning and judgement

- Make decisions by applying appropriate and clear clinical reasoning using an evidence based approach
- Participate in departmental audit and understand its value in improving practice
- Participate in personal audit and understand its value of in improving practice
- Appreciate the importance of basic scientific and clinical research
- Understand service management, so as to allow involvement in the organisation of ophthalmic clinical services

A3. The retinal specialist as a professional

A3i. Role in health service

- Understands the principles and practice of clinical governance
- Recognises and accepts the responsibilities and role of the Retinal Specialist in relation to other healthcare professionals
- Recognises and accepts the responsibilities and role of the Retinal Specialist as the leader and member of a multi-professional clinical team
- Recognises and accepts the responsibilities and role of the Retinal Specialist in the protection of children and others with special needs
- Recognises and accepts the responsibilities and role of the Retinal Specialist in the provision of optimum healthcare for the community
- Recognises and accepts the responsibilities and role of the Retinal Specialist as a researcher
- Recognises and accepts the responsibilities and role of the Retinal Specialist as a teacher and trainer
- Recognises and accepts the responsibilities and role of the Retinal Specialist as a clinical manager

A3ii. Personal and Professional development

- Aptitude for personal and professional development, in particular:
- Adopts reflective practice
- Aware of the limits of his/her own knowledge and insight into his/her own difficulty in understanding complex interactions
- Able to direct his/her own self-learning
- Able to practice the 'art' of medicine in those situations when medical science does not offer clear guidance.
- Participates in continued professional development
- Takes responsibility for personal career development
- Takes responsibility for the implications of personal health on professional practice

B. Programme delivery

Appropriate off-the-job education

This can be used in a variety of ways that include:

- Attendance at courses
- Attendance at regional, national and international sub-specialty meetings
- Private study

Local postgraduate meetings

The content of these sessions will be determined by the Consultant staff and will be based around the Australian ophthalmology training curriculum. Suggested activities include:

- Case presentations
- Research and audit projects
- Lectures
- Clinical skills demonstrations and teaching
- Critical appraisal and evidence based medicine and journal clubs
- Joint specialty meetings e.g. radiology, pathology

Independent self-directed learning

The Fellow will use this time in a variety of ways depending upon their stage of learning. Suggested activities include:

- Appraisal, feedback and reflection
- Reading
- Audit and research projects
- Achieving personal learning goals beyond the essential, core curriculum

The remaining time for work-based experiential learning

The content of this work-based experiential learning will include active participation in:

- Retinal clinics
- Laser clinics
- Eye emergency/casualty/acute referral clinics
- In-patient and day case clinical care
- Ophthalmic surgery

Some of the learning outcomes will be best achieved in some programmes by active participation in or attendance at (this list is illustrative):

- Low vision aid/visual rehabilitation clinics
- Clinical reporting sessions e.g. retinal angiography, neuro-radiology, pathology
- Ocular investigation sessions e.g. biometry, ultrasound, visual fields, electrodiagnostics

Timetable

	Monday	Tuesday	Wednesday	Thursday	Friday
a.m	Retina Clinic <i>Lake</i>	Operating theatre <i>Saha</i>	Retina Clinic <i>Lake</i>	Operating theatre <i>Lake</i>	Laser/injection <i>Saha/Lake</i>
p.m	Operating theatre <i>Saha/Lake</i>	Retina Clinic <i>Saha</i>	Departmental teaching	Operating theatre <i>Lake</i>	Laser/injection <i>Saha/Lake</i>

Assessment

Assessment will be informal and be based on the established tools of:

Case-based discussion

Objective Assessment of Surgical and Technical Skills

Direct Observation of Procedural Skills

On completion of the Retinal Fellowship the participant will receive a certificate stating that the Fellowship period has been completed.

These do not signify any particular level of competence or expertise and it is upto the Fellow's future employers to assess competency or expertise to their satisfaction.