



Royal North Shore Hospital

Job Description / Statement of Duties

Position:	Simulation Education Fellow /Registrar
Facility:	Royal North Shore Hospital
Centre:	Sydney Medical Simulation Centre
Department:	Sydney Medical Simulation Centre
Award Classification:	NSW Public Hospital Medical Officers Award
Hours:	20 Hours per week (0.5 FTE) for 12 months or 1FTE for 6 months
Responsible to:	Director of Simulation Centre – Dr Leonie Watterson FANZCA Term Supervisor – Dr John Vassiliadis FACEM

Description of the Simulation Fellowship/Registrar program

The Simulation trainee position is a structured program comprising graded workplace learning and supervised practice relevant to the provision of simulation training for a multi-professional healthcare audience. Historically, trainees have undertaken the simulation training program in tandem with a 0.5 FTE appointment elsewhere.

Prerequisites:

Prerequisites for the position include completion of basic vocational training in emergency medicine, accredited by ACEM.

Outcomes:

If completed at a satisfactory level, by completion of the one year (6 month) program, the trainee will have the relevant knowledge, skills, attitudes and workplace experience to independently manage the key components of training conducted within simulation laboratories.

These components comprise: Undertake a needs analysis; design a learning curriculum; manage a technical team; train, mentor and support faculty; team lead a course, instruct in relevant topics (Emergency Medicine practice, critical care medicine, retrieval medicine, Human factors, teamwork and assessment) and conduct assessment and certification (for relevant courses). The abovementioned skills will have been applied to a range of multi-professional groups, especially those in critical care, resuscitation and aero-medical retrieval fields.

Specific objectives

1. Acquisition of knowledge and skills relevant to simulation-based education and training.
2. Participation in research program and acquisition of research skills.
3. Participation in the general operational aspects of the centre and team function.

1) Trainee in simulation-based education and training

The key role of the trainee is to undertake an experiential apprenticeship in simulation-based education and training. The position will involve approximately 40% of time to be engaged in face-to-face teaching and an additional 40% to be engaged in the development and preparation of curricular or educational materials. The latter time also includes other learning activities aimed at the development of the trainee's skills. These include: private reading; participation in instructor training and reflective exercises based on hands-on teaching activities.

It is expected that at the completion of the program, the trainee will:

- a) Have practical experience and be fluent with the **simulation-curriculum**.
Simulation training is often structured around clinical emergencies, generated on patient manikin simulator. Management focuses on clinical skills and/or non-technical skills. These include:
- i) Crisis management skills. This is based on the aviation model of Cockpit Resource Management (CRM) and includes non-technical skills such as situation awareness, problem-solving, time-critical decision-making, workload reduction, leadership and teamwork and emergency communication skills.
 - ii) Leadership & Teamwork. This is a component of CRM but can, and frequently is, made the focus of the training.
 - iii) Interdisciplinary team training targets teams from different units who converge in the emergency department during an emergency...
 - iv) Clinical management and rehearsal of common and rare emergencies.
 - v) Clinical decision-making.
 - vi) ABC drills and other algorithms.
 - vii) Advanced clinical skills
 - viii) Patient-doctor interaction
 - ix) Stress management
 - x) Medical error, organizational safety and learning from mistakes.
 - xi) Multiple casualties
 - xii) Stabilization for medical retrieval
- b) Have experience and be fluent teaching a range of **educational methods**. These include:
- i) Scenario-based learning
 - ii) Reflective learning and debriefing after simulated scenarios
 - iii) Pause and discuss
 - iv) Clinical skills workshops
 - v) Video-based discussions
 - vi) Games
- c) Have experience and be fluent in a range of **skills required to be a provider of simulation-based training**. These include:
- i) Operation and programming of simulators: [METI HPS, ECS; Laerdel Simman]
 - ii) Operation of Audio-visual technologies
 - iii) Management of the simulated training environment
 - iv) Coordination and team leadership for providing a training course
- d) Have experience and be fluent teaching a range of **relevant target learners**. These include:
- i) Emergency Physicians and Emergency Trainees
 - ii) Anaesthetists
 - iii) Junior Medical Officers

- iv) Nurses
 - v) Armed Defence Force Personnel
 - vi) Other learner groups would depend upon background and interests of the trainee.
- e) Have experience and be fluent teaching a **representative range of training courses**. These include:
- i) Advanced and Complex Medical Emergencies (ACME)
 - ii) Emergency Medicine Crisis Management (EMCM)
 - iii) Effective Management of Anaesthesia Crises (EMAC)
 - iv) Cardiac Arrest and Medical Emergencies Course (CAMEC)
 - v) Emergency Team Training (ETT)
 - vi) Paediatric Emergency Training and Advanced Life Support (PETALS)
 - vii) Other courses would depend upon background and interests of the trainee.

2) Participation in research programs

- a) The Trainee will be encouraged to participate in the centre's existing research program and may work toward co-authorship on studies in progress.
- b) He or she will be encouraged to initiate and see to completion a small research project which can be completed within the period of the program. Ideally, this would result in submission of a paper or abstract in a scientific journal or conference.
- c) Any research activity undertaken by the trainee will have an appropriately designated supervisor.
- d) It would be expected that 20% of time might be reasonably directed to research.

It is expected that at the completion of the simulation program, the trainee will have:

- a) an understanding of the principles of research pertaining to educational evaluation and performance assessment.
- b) performed a search of the scientific literature.
- c) An understanding of the requirements of an ethics committee submission and the principles of conducting a study which meets standards for ethical practice and privacy.
- d) practical experience in the administration of a study protocol.
- e) a basic working knowledge of data entry and analysis
- f) submitted an abstract or poster in a conferences or article in a peer reviewed journal.

3) General promotion of the centre's work and outcomes

- a) As part of the centre's team for 12 months it will be essential that the trainee engage and work effectively as a member of a small, creative multidisciplinary team. It is essential that the trainee is able to communicate effectively and harmoniously with his or her team-mates and work co-operatively toward the centre's goals.

Updated June 2008

- b) The centre is responsible for developing original curricular, technologies and educational methodologies. These are protected by copyright. It is essential that the Fellow observe standard codes of conduct with respect to Intellectual Property and Academic Conduct.