



وعدة ضمال الجودة

ممهد جنوب مصر الإورام

معور التعليم و التعلم

عرفق رقب (٤ / ١ / ١ / ١ / ١









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Anesthesia ICU and Pain Relief (MD) Programme Specification

A. Basic Information:

| Programme Title: | Anesthesia ICU and Pain Relief (MD) | | |
|------------------------|-------------------------------------|---------------------|-------------------|
| Programme Type: | Single ✓□ | Double 🗆 | Multiple 🗆 |
| Department(s): | Anesthesia ICU and F | Pain Relief | |
| Coordinator: | Ahmed Hassan Othman (| M.D) (e-mail) ahmad | hothman@gmail.com |
| External Evaluator(s): | Prof. Abd Elfattah Abd Els | attar | |
| Review Date: | 1/9/2009 | . | |
| Date of Approval: | 28 / 5/ 2005 | | |

B. Professional Information

1. Programme Aims

The aims of this programme are to:

- Sound knowledge and practice of general and regional anesthetic techniques for different diseases and surgical specialties.
- Knowledge and skills of accurate diagnosis, prophylaxis and treatment of critical disorders of different organs or systems.
- Knowledge and skills to be capable of accurate diagnosis and treatment of different pain syndromes.
- Knowledge of statistical analysis of different clinical studies.
- Knowledge of basic principles of etiology, types, diagnosis, and treatment of cancer.

2. Programme Intended Learning Outcomes (ILOs)

A. Knowledge and understanding

By the end of doctoral study program the graduate must be able to understand and know each of the following:

- A1. The Methodologies, ethics and statistical analysis of different scientific research studies.
- A2. The general principles of etiology, diagnosis, and treatment of cancer.

- A3. The anatomic, physiologic, biochemical, physical and pharmacologic basics relevant to anesthesia and pain practice.
- A4. The use of fundamentals and recent advances in pre, intra, and postoperative anesthetic management (general and regional techniques) for different disease states and surgical specialties.
- A5. The pathophysiology, diagnosis, monitoring and treatment of dysfunction of different organs
- A6.The different approaches to assessment, diagnosis, and management of acute and chronic pain syndromes.
- A7.Conduct fundamental or applied research and apply ethical standards in both patient care and research.
- A8. Principles and fundamentals of quality in professional practice in anesthesia, ICU and pain relief.
- A9. Demonstrate an ability to establish safe environments for clinical practice, which minimize risk to patients, and others, including safe equipment operation, the use of hazard control and infection control procedures.

B. Intellectual skills

By the end of doctoral study program the graduate must be able to:

- B1. Plan appropriate anesthetic management in different disease states and surgical specialties.
- B2. Interpret physical findings, monitoring, laboratory and radiological data of the criticallyill patients; and to plan treatment protocols.
- B3. Interpret physical, laboratory and radiological data of patients with acute or chronic pain; to differentiate possible diagnoses; and to plan treatment protocols.
- B4.Design, write and interpret clinical research studies; Evidence-Based Medicine.
- B5. Risk assessment in professional practice.
- B6.Plan of performance development in anesthesia, ICU and pain relief.
- B7. Take decision-making in different professional contexts.
- B8. Have innovation/creativity.
- B9. Have scientific discussion and debate based on facts and evidence.

C. Professional and practical skills

By the end of doctoral study program the graduate must be able to:

- C1.Demonstrate competence in proper history-taking and physical examination of the patients.
- C2.Conduct evidence-based practice, evaluate practice systematically and participate in audit procedures.
- C3. Properly secure patency of upper airway during anesthesia with different methods including fibreoptic bronchoscopy
- C4. To perform neuroaxial and peripheral nerve blocks.
- C5. Properly monitor patients and manage anesthesia in different disease states and surgical specialties.
- C6.Initiate, maintain, wean from mechanical ventilation and to practice advanced cardiac life support (ACLS).
- C7.Perform procedures for low back pain and perform sympathetic blocks, neuro-axial implants, vertebroplasty and radiofrequency techniques.
- C8. Change practice as needed to take account of new developments and technologies.
- C9. Write and evaluate professional reports.

C10.Plan for the development of professional practice and development of performance of others.

D. General and transferable skills

By the end of doctoral study program the graduate must be able to:

- D1. Demonstrate an ability to gather and evaluate evidence and information from a wide range of sources.
- D2. Demonstrate effective skills in communicating information, advice, instruction and professional opinion to colleagues, patients, their relatives and carers (including informed consent).
- D3. Work in a team and have the ability of team leadership.
- D4. Manage of scientific meetings and the time management ability.

3. Programme Academic Standards

A. Graduate standards:

- M.D. program graduates in anesthesia, ICU and pain relief must be able to:
- 1. Mastering the basics of scientific research and methodologies.
- 2. Continuing work to upgrade knowledge in anesthesia, ICU and pain relief.
- Application of analytical and critical approach to knowledge in anesthesia, ICU and pain relief.
- 4. Integration of specialized knowledge with other related knowledge.
- 5. Show deep awareness of ongoing problems and modern theories in anesthesia, ICU and pain relief.
- 6. Problem identification and finding innovative professional solutions to solve it
- 7. Proficiency in a wide range of professional skills in anesthesia, ICU and pain relief.
- 8. Orientation towards the development of methods, tools and new techniques of professional practice.
- 9. Use appropriate technological means to serve the professional practice.
- 10. Effective communication and team leadership in different professional contexts.
- 11. Decision-making in the light of available information.
- 12. Efficient use and development of available resources and continuous work to find new resources.
- 13. Awareness of graduate role in the development of society and the preservation of the environment.
- 14. Acting with commitment to integrity and credibility of the profession.
- 15. Commitment to continuing self-development and transfer of knowledge and experience to others.

B. general standards:

2.1 Knowledge and understanding

By the end of doctoral study program the graduate must be able to understand and know each of the following:

- A. Theories, fundamentals and modern knowledge in the field of anesthesia, ICU and pain relief and related fields.
- B. Methodologies and the ethics of scientific research and its various tools
- c. Legal and ethical principles of professional practice in anesthesia, ICU and pain relief.
- D. Principles and fundamentals of quality in professional practice in anesthesia, ICU and pain relief.
- **E.** Knowledge of the effects of professional practice on the environment and development of tools to keep and maintain the environment.

2.2 Mental skills

By the end of doctoral study program the graduate must be able to:

- A. Analyze and assess information in anesthesia, ICU and pain relief and use it in problem solving and prevention.
- B. Conduct research studies which add and upgrade knowledge in anesthesia, ICU and pain relief.
- C. Drafting and writing scientific papers.
- D. Risk assessment in professional practice.
- E.Plan for performance development in anesthesia, ICU and pain relief.
- F. Take decision-making in different professional contexts.
- G. Have innovation/creativity.
- H.Have scientific discussion and debate based on facts and evidence.

2.3 Professional skills

By the end of doctoral study program the graduate must be able to:

- A.Mastering the basic professional skills and specialization in anesthesia, ICU and pain relief.
- B.Write and evaluate professional reports.
- C.Use technological means to serve the professional practice.
- D.Plan for the development of professional practice and development of performance of others.

2.4 General and transferable skills

By the end of doctoral study program the graduate must be able to:

- A. Have effective communication of all kinds.
- B. Use information technology to serve the development of professional practice.
- C. Teach others and evaluate their performance.
- D. Have self-assessment and continuous learning.
- E. Use of different resources for information and knowledge.
- F. Work in a team and have the ability of team leadership.
- G. Manage of scientific meetings and the time management ability.

C. External references standards (Benchmarks):

 Union Européenne des Médecins Spécialistes/European Board of Anaesthesiology (UEMS/EBA).

http://www.euroanaesthesia.org/Sitecore/Content/Education/Guidelines/ESA Endorsed Guidelines/EBA Guidelines

Comparison of provision to selected external references.

- Matching goals, and ILOs

- Different program structure time table

The duration of our programme is short when compared to the EBA which requires at least 5 years with at least 1 year can be specifically directed to Intensive Care Medicine training. Our programme is defective in training of Quality assurance and Health economics Defect in training of both managerial and administrative responsibilities Defect in training of Anaesthesia Non-Technical Skills (ANTS)

The future plan

Prolong the programme duration.

Introduce a specific course for quality assurance and heath economics.

Provide a special attention for the anesthesia non-technical skills.

2. The General Assiut Faculty of Medicine post graduate programs. http://www.aun.edu.eg/faculty-medicine/postgraduate_department/anesthesiology

D. Curriculum Structure and Contents

A. Programme duration

1. First part:

6 months i.e. one semesters

2. Second part: 18 months i.e. three semesters

3. Thesis:

6 months or more i.e. at least one semester15 credit hours

B. Program Structure

Number of hours per week in each year/semester

| Year | Semester | Lectures | Tutorials | Practical | Total |
|-----------------|-----------------|----------|-----------|-----------|-------|
| 1 st | 1 st | 7 | 3 | | 10 |
| 1 st | 2 nd | 2 | 4 | 5 | 11 |
| 2 nd | 3 rd | 3 | 3 | 5 | 11 |
| 2 nd | 4 th | 2 | 3 | 5 | 10 |
| Thesis | 5 th | · · · | | * | 15 |

E. Programme Courses

Compulsory Courses contributing to the program

| Title | Code | Semester | Number of hours/wk | Program ILOs covered |
|------------------------------|----------------|-----------------|--------------------|----------------------|
| Epidemiology & Biostatistics | Ana Alg 701 | 1 st | 1 | R |
| Basics of Anesthesia | Ana Alg 703 | 1 st | 8 | Refer to |
| Basics of Anatomy | Ana Alg 704 | 1 st | 1/2 |) Matrix |
| Pharmacology | Ana Alg 705 | 1 st | 2 | |
| Biochemistry of Pain | Ana Alg 706 | 1 st | 1/2 | below |

| Physics & clinical measurement | Ana Alg 707 | 1 st | 2 | |
|--|----------------|-----------------|---|--|
| Physiology | Ana Alg 708 | 1 st | 8 | |
| Terminal care Course | Ana Alg 709 | 2 nd | 2 | |
| Surgical Intensive Care Course | Ana Alg 710 | 2 nd | 2 | |
| Pain assessment | Ana Alg 711 | 2 nd | 4 | |
| Pain management | Ana Alg 712 | 2 nd | 4 | |
| Anesthesia, general, local and regional | Ana Alg 713 | 3 rd | 4 | |
| Anesthesia Special | Ana Alg 714 | 3 rd | 4 | |
| Anesthesia for neurosurgery | Ana Alg 719 | 3 rd | 4 | |
| Anesthesia for cardiac and thoracic surgery. | Ana Alg 720 | 3 rd | 4 | |
| Anesthesia for pediatric surgery | Ana Alg 721 | 4 th | 4 | |
| Interventional pain therapy | Ana Alg 722 | 4 th | 4 | |
| Neuro-axial drug delivery Systems. | Ana Alg 723 | 4 th | 4 | |

D4 D3 D2 D1 C10 C9 Page 7 of 9 C8 **C7** C6 **C5** C4 С3 C2 C1 В9 В8 В7 В6 B5 B4 South Egypt Cancer Institute, Assiut University, Assiut, Egypt. В3 **B2** В1 Α9 A8 South Egypt Cancer Institute A7 A6 A. Programme Courses ILOs Matrix Α5 Α4 А3 **A2 A1** Course Code Ana Alg 701 Ana Alg 703 Ana Alg 704 Ana Alg 705 Ana Alg 710 Ana Alg 706 Ana Alg 707 Ana Alg 708 Ana Alg 709 Ana Alg 711 Ana Alg 712 Ana Alg 713 11,0s

South Egypt Cancer Institute, Assiut University, Assiut, Egypt.

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F. Programme Admission Requirements

To be admitted to the Anesthesia and Pain Relief Doctorate Degree Programme, the candidate should have got Master Degree in Anesthesiology with at least ((Good)) evaluation.

G. Regulations for Progression and Programme Completion

- a. The candidate must pass the exam of the 1st part to admit to the 2nd part.
- b. Then, the candidate must pass the exam of the 2nd part and the discussion of the thesis to complete the programme and to get the degree.

H. Methods of ILOs Assessment

| Assessment Method | ILOs assessed |
|-----------------------|---|
| Written Examination | A1, A2, A3, A4, A5, A6, B1, B2, B3, |
| Oral Assessment | D1, D2 |
| Practical Examination | B4, C1, C2, C3, C4, C5, C6, C7, C8, C9, C10 |
| Semester work | |

I. Evaluation of Programme

South Egypt Cancer Institute, Assiut University, Assiut, Egypt.

| Evaluator | Tool | Sample |
|--|---------------|--|
| Senior students | Questionnaire | |
| 2. Alumni | Questionnaire | minimipus que e o material company d'un e e con conserve |
| 3. Stakeholders(Employers) | Questionnaire | . It is transferred integrals As in its in accommon account of Mach annual |
| 4. External Evaluator(s)(External Examiner(s)) | Questionnaire | ed, a some security property do some security |
| 5. Others | Questionnaire | |

| | Names | Signature | Date |
|---------------------------|-------|-----------|------|
| Programme Coordinator(s): | | | |
| Head of Department: | | | |
| Dean of Institute: | | | |
| | | | |