

**Programme Specification for the Postgraduate Diploma in Preventive Cardiology**

PLEASE NOTE. This specification provides a **concise** summary of the main features of the programme and the learning outcomes that a typical student might reasonably be expected to achieve and demonstrate if he/she takes full advantage of the learning opportunities that are provided. This specification provides a source of information for students and prospective students seeking an understanding of the nature of the programme and may be used by the College for review purposes and sent to external examiners. More detailed information on the learning outcomes, content and teaching, learning and assessment methods of each module can be found in the course handbook or on-line at: <http://www1.imperial.ac.uk/medicine/teaching/postgraduate/taughtcourses/preventivecardiology/>. The accuracy of the information contained in this document is reviewed by the College and may be checked by the Quality Assurance Agency.

- |   |   |
|---|---|
| <b>1. Awarding Institution:</b>   | Imperial College London                     |
| <b>2. Teaching Institution:</b>   | Imperial College London                     |
| <b>3. External Accreditation by Professional / Statutory Body:</b>                                    | Not applicable                              |
| <b>4. Name of Final Award:</b>  | PG Diploma                                  |
| <b>5. Programme Title:</b>  | Preventive Cardiology                       |
| <b>6. Name of Department / Division:</b>  | Cardiovascular Medicine, NHLI               |
| <b>7. Name of Faculty:</b>  | Medicine                                    |
| <b>8. UCAS Code:</b>  | A3D18                                       |
| <b>9. Relevant QAA Subject Benchmarking Group(s) and/or other external/internal reference points:</b> | Medicine and the Health Professions Council |
| <b>10. Level(s) of programme within the Framework for Higher Education Qualifications (FHEQ):</b>     | Level 7                                     |
| <b>11. Mode of Study:</b>   | Part-time                                   |
| <b>12. Language of Study:</b>   | English                                     |
| <b>13. Date of production / revision of this programme specification:</b>                             | July 2011                                   |
| <b>14. Educational aims/objectives of the programme</b>   |   |

The programme aims/objectives are to:

- attract highly motivated students, both from the UK and overseas;
- produce graduates equipped to pursue careers in preventive cardiology (primary and secondary), in hospitals, primary care and the public sector;
- develop a high level of knowledge and understanding of preventive cardiology and the management of cardiovascular risk;
- develop skills in the assessment and management of patients with established cardiovascular disease, patients at high cardiovascular risk and their families;
- develop effective communication skills;
- develop critical appraisal skills;
- develop problem-solving skills;
- provide a training in research skills;
- provide an experience which is intellectually stimulating, enjoyable, and meets students' needs;
- provide an internationally accepted postgraduate qualification;
- stimulate lifelong learning;
- provide a solid foundation for those who intend to go on to study for an MSc.

## 15. Programme Learning Outcomes

### A. Knowledge and Understanding of:

1. the aetiology, epidemiology, pathophysiology, diagnosis, clinical features, investigations and management of cardiovascular risk;
2. lifestyle and risk factors for cardiovascular disease in detail
3. international and national policies and guidelines for prevention of cardiovascular disease
4. wider policy, governmental and societal influences in the prevention of CVD
5. assessment methodology and tools in estimation of cardiovascular risk
6. assessment methods for screening CVD risk to include smoking, diet, physical activity, psychosocial status and medical risk factors
7. theory of health promoting practice
8. theoretical models and techniques in behaviour change
9. smoking cessation strategies
10. principles of diet and weight management strategies
11. physiological principles of physical activity and exercise in cardiovascular disease prevention and rehabilitation
12. management of blood pressure, cholesterol and glucose
13. optimisation of therapeutic and prophylactic pharmacological therapy
14. health related research methods
15. management and communication skills, including problem definition, decision processes, teamwork, written and oral reports, scientific publications.

#### Teaching/learning methods and strategies

- Acquisition of A1 to A14 is through a combination of lectures, seminars, tutorials and laboratory work, and coursework.
- Acquisition of A15 is through a combination of lectures, laboratory exercises, coursework, small group projects linked to workshops with group and individual presentations.
- Throughout the students are encouraged to undertake independent reading both to supplement and consolidate what is being taught / learnt and to broaden their individual knowledge and understanding of the subject.
- Assessment of the knowledge base is through a combination of unseen written examinations (A1-A13) and assessed coursework via case presentations (A5-15).

### Skills and other attributes

#### B. Intellectual (thinking) skills - able to:

1. Synthesis from a comprehensive cardiovascular assessment a clinically reasoned management plan;
2. plan appropriate investigations and treatment;
3. critically evaluate the literature;
4. evaluate the effectiveness of a comprehensive preventive cardiology programme.

#### Teaching/learning methods and strategies

- Acquisition of B1 to B4 through problem-based learning sessions
- Acquisition of B1 to B4 through seminars and tutorials, based around case presentations
- Journal club (B3)
- Assessment of thinking skills is partly achieved through coursework, unseen written examinations and assessed practicals.

#### C. Practical skills – able to:

1. plan and execute competently a comprehensive cardiovascular assessment comprising of estimation of cardiovascular risk; assessment of lifestyle (smoking, diet and physical activity) and measurement of medical risk factors (blood pressure, lipids and glucose);
2. competently practically deliver at least one component of a lifestyle intervention (smoking cessation, diet and weight management and/or physical activity)
3. analyse clinical outcome measures and determine their strength and validity;
4. give technical presentations;
5. use the scientific literature effectively;
6. use computational tools and packages.

### Teaching/learning methods and strategies

- Practical skills are developed through the teaching and learning programme outlined above.
- Practical skills (C1 to C3) are developed through clinical experience and project work.
- Skills C3 and C4 are taught and developed through feedback on reports written and presentations made as part of coursework.
- Skill C5 is developed through lectures, coursework reports and essays.
- Skill C6 is taught and developed through coursework exercises.
- Practical skills are assessed through practical examinations and case presentation reports.

### D Transferable skills – able to:

1. communicate effectively through oral presentations, computer processing and presentations, written reports and scientific publications;
2. work as part of a team, recognising the strengths, weaknesses, needs and sensitivities of others;
3. communicate and interact effectively with other people and in a small group transfer techniques and solutions from one discipline to another;
4. apply statistical and modelling skills;
5. use IT resources effectively;
6. manage resources and time;
7. learn independently with open-mindedness and critical enquiry;
8. learn effectively for the purpose of continuing professional development.

### Teaching/learning methods and strategies

- Transferable skills are developed through the teaching and learning programme outlined above.
- Skill D1 is taught through coursework and developed through feedback on reports, essays and oral presentations. Skill D2 and D3 are taught through practical work. Skills D4 to D6 are developed through group project work. Although not explicitly taught, skills D7 and D8 are encouraged and developed throughout the course, which is structured and delivered in such a way as to promote this
- Skill D1 is assessed through coursework, workshop presentations, written examinations and the oral examination. Skill D2 is assessed through coursework, written examinations and clinical work.
- Skills D3 to D5 are assessed in workshops. The other skills are not assessed formally.

### 16. The following reference points were used in creating this programme specification

Student Handbook (for Course approved by Senate of Imperial College)

### 17. Programme structure and features, curriculum units (modules), ECTS assignment and award requirements

The programme involves completing 6 modules over an 18-month period part-time. Successful completion leads to the PG Diploma (PGDip). The course uses a blended-learning design. The course commences in October each year and runs for 32 weeks in total. The PGDip course is based on a series of lectures, e-based formative assessments and learning tools, interactive seminars, tutorials, clinical preventive cardiology programme observations, and student presentations which take place throughout the year. The course is modular and divided into two elements (a). The *CORE* element (30 ECTS) comprising of 3 core compulsory modules (1. Preventive cardiology theory and practice; 2. Research Methods; 3. Reflective clinical practice). (b) the *SPECIALIST* element (30 ECTS) comprising of a choice of 3 of the 6 specialist optional modules (1. Risk estimation; 2. Smoking cessation; 3. Nutrition and weight management; 4. Physical activity and exercise; 5. Medical risk factor management; 6. Prevention and management of diabetes. Each individual module is assessed and contributes to the final result. A PGDip Committee chaired by Professor David Wood have overall responsibility for the course.

### Course structure:

#### Term one:

All students attend a core induction week.

Students attend the preventive cardiology theory and practice in their first year and research methods in their second year. Students participate in clinical placements (Reflective Practice) in both years 1 and year 2.

1. Core Taught Module: Preventive cardiology theory and practice (core compulsory module 10 ECTS)
2. Core Taught Module Research methods (core compulsory module 15 ECTS)
3. Clinical Placements: Reflective clinical practice (5 ECTS)

### **Term Two and Term Three:**

All students continue to participate in clinical placements (Reflective clinical practice continued [5 ECTS])

In addition all students complete 3 of the 6 optional specialist modules (each 10 ECTS) which occur over term 2 and term 3. Students must select one optional specialist module from both category A and B and the third from either. Students who are qualified nurses are able to select one optional module from Category C (from the MSc Cardiorespiratory Nursing programme).

### **Category A**

1. Smoking cessation
2. Nutrition and weight management
3. Physical activity and exercise

### **Category B**

1. Risk estimation
2. Medical risk factor management
3. Prevention and management of diabetes

### **Category C (available to nurses only)**

1. Evidence-based Health Care
2. Physical Assessment Module

### **18. Support provided to students to assist learning (including collaborative students, where appropriate).**

- Site Course Directors
- One week induction programme for orientation, introduction to library and computer facilities
- PGDip Student weekly timetable
- St Mary's, South Kensington, Hammersmith and Charing Cross library including online facilities
- The Preventive Cardiology Staff – Student Committee, which meets three times per year
- Allocated personal tutor
- Student e-mail via Imperial College
- Access to purposefully designed e-based learning tools and formative activities and assessments
- Access to student counsellors on the South Kensington site
- Access to Imperial College Welfare Services

### **19. Criteria for admission:**

- The minimum qualification for admission is normally an Upper Second Class Honours degree in a health or science-based subject from an UK academic institution, MBBS or an equivalent overseas qualification. A special case for admission may be submitted to the Graduate School of Life Sciences and Medicine Postgraduate Quality Committee for students without a first degree. All applicants must normally be registered health professions (e.g. registered nurse, dietitian, physiotherapist, pharmacist, medic) or Level 4 for the register for exercise professionals. All applicants must have two suitable references and require proficiency in English.

### **20. Processes used to select students:**

- Applications are assessed on an individual basis by the course management team and subject to meeting the academic entrance criteria are subsequently interviewed, either in person or via telephone interview. Students not meeting the academic entry requirements but with significant relevant clinical experience may be offered a special qualifying examination entrance route.

## 21. Methods for evaluating and improving the quality and standards of teaching and learning

### a) Methods for review and evaluation of teaching, learning, assessment, the curriculum and outcome standards:

The external examiner system and Boards of Examiners are central to the process by which the College monitors the reliability and validity of its assessment procedures and academic standards. Boards of Examiners comment on the assessment procedures within the College and may suggest improvements for action by relevant departmental teaching Committees.

The Faculty Studies Committees and the Graduate Schools' Postgraduate Quality Committees review and consider the reports of external examiners and accrediting bodies and conduct periodic (normally quinquennial) and internal reviews of teaching provision. Regular reviews ensure that there is opportunity to highlight examples of good practice and ensure that recommendations for improvement can be made.

At programme level, the Head of Department/Division has overall responsibility for academic standards and the quality of the educational experience delivered within the department or division.

Most of the College's undergraduate programmes are accredited by professional engineering and science bodies or by the General Medical Council. Accreditation provides the College with additional assurance that its programmes are of an appropriate standard and relevant to the requirement of industry and the professions. Some postgraduate taught courses are also accredited.

### b) Committees with responsibility for monitoring and evaluating quality and standards:

The **Senate** oversees the quality assurance and regulation of degrees offered by the College. It is charged with promoting the academic work of the College, both in teaching and research, and with regulating and supervising the education and discipline of the students of the College. It has responsibility for approval of changes to the Academic Regulations, major changes to degree programmes and approval of new programmes.

The **Quality Assurance Advisory Committee (QAAC)** is the main forum for discussion of QA policy and the regulation of degree programmes at College level. QAAC develops and advises the Senate on the implementation of codes of practice and procedures relating to quality assurance and audit of quality and arrangements necessary to ensure compliance with national and international standards. QAAC also considers amendments to the Academic Regulations before making recommendations for change to the Senate. It also maintains an overview of the statistics on completion rates, withdrawals, examination irregularities (including cases of plagiarism), student appeals and disciplinarys.

The **Faculty Studies Committees** and **Graduate School Postgraduate Quality Committees** are the major vehicle for the quality assurance of undergraduate / postgraduate courses respectively. Their remit includes: setting the standards and framework, and overseeing the processes of quality assurance, for the areas within their remit; monitoring the provision and quality of e-learning; undertaking reviews of new and existing courses; noting minor changes in existing programme curricula approved by Departments; approving new modules, changes in module titles, major changes in examination structure and programme specifications for existing programmes; and reviewing proposals for new programmes, and the discontinuation of existing programmes, and making recommendations to Senate as appropriate.

The **Faculty Teaching Committees** maintain and develop teaching strategies and promote inter-departmental and inter-faculty teaching activities to enhance the efficiency of teaching within Faculties. They also identify and disseminate examples of good practice in teaching.

**Departmental Teaching Committees** have responsibility for the approval of minor changes to course curricula and examination structures and approve arrangements for course work. They also consider the details of entrance requirements and determine departmental postgraduate student numbers. The Faculty Studies Committees and the Graduate School Postgraduate Quality Committees receive regular reports from the Departmental Teaching Committees.

### c) Mechanisms for providing prompt feedback to students on their performance in course work and examinations and processes for monitoring that these named processes are effective:

- Final draft of written assignment can be submitted to personal tutors for comments
- Mock examinations with feedback
- Personal tutors meet with tutees at least once each term for discussions on academic progress.
- Regular e-based formative assessments
- Examinations boards are held three times annually allowing early feedback of board approved grades and comments from external examiners.

**d) Mechanisms for gaining student feedback on the quality of teaching and their learning progress experience and how students are provided with feedback as to actions taken as a result of their comments:**

- Preventive Cardiology Staff – Student Committee held once each term;
- meetings with personal tutees;
- course questionnaire evaluation of taught components;
- meeting of individual students with course organisers to discuss exams, assignments and career aims.

**e) Mechanisms for monitoring the effectiveness of the personal tutoring system:**

- Preventive Cardiology Staff – Student Committee held once each term;
- personal tutor meetings record forms are completed and filed in each individual students records;
- course questionnaire evaluation of taught components;

**f) Mechanisms for recognising and rewarding excellence in teaching and in pastoral care:**

Staff are encouraged to reflect on their teaching, in order to introduce enhancements and develop innovative teaching methods. Each year College awards are presented to academic staff for outstanding contributions to teaching, pastoral care or research supervision. A special award for Teaching Innovation, available each year, is presented to a member of staff who has demonstrated an original and innovative approach to teaching. Nominations for these awards come from across the College and students are invited both to nominate staff and to sit on the deciding panels.

**g) Staff development priorities for this programme include:**

- active research programme in preventive cardiology;
- staff appraisal scheme and institutional staff development courses;
- college Teaching Development Grant Scheme to fund the development of new teaching and appraisal methods;
- updating professional and IT/computing
- development our virtual learning environment.

## **22. Regulation of Assessment**

**a) Assessment Rules and Degree Classification:**

The PGDip in Preventive Cardiology comprises of the student competing 6 modules in total, each of which must be *individually* passed. The Pass Mark for postgraduate taught courses is 50%. Postgraduate Diplomas are unclassified and are pass fail only.

**b) Marking Schemes for postgraduate taught programmes:**

The Pass Mark for all **postgraduate** taught course modules is 50%. Students must pass all modules in order to be awarded a PGDip.

**c) Processes for dealing with mitigating circumstances:**

A candidate for a PGDip who is prevented owing to illness or the death of a near relative or other cause judged sufficient by the Graduate Schools from completing at the normal time the examination or Part of the examination for which he/she has entered may, at the discretion of the Examiners,

(a) Enter the examination in those elements in which he/she was not able to be examined on the next occasion when the examination is held in order to complete the examination,

or

(b) be set a special examination in those elements of the examination missed as soon as possible and/or be permitted to submit any work prescribed (e.g. report) at a date specified by the Board of Examiners concerned. The special examination shall be in the same format as specified in the course regulations for the element(s) missed.

Applications, which must be accompanied by a medical certificate or other statement of the grounds on which the application is made, shall be submitted to the Academic Registrar who will submit them to the Board of Examiners.

**d) Role of external examiners:**

The primary duty of external examiners is to ensure that the diplomas awarded by the College are consistent with that of the national university system. External examiners are also responsible for approval of draft question papers, assessment of examination scripts, projects and coursework (where appropriate) and in some cases will attend *viva voce* and clinical examinations. Although external examiners do not have power of veto their views carry considerable weight and will be treated accordingly. External examiners are required to attend each meeting of the Board of Examiners where recommendations on the results of individual examinations are considered. External examiners are required to write an annual report to the Rector of Imperial College which may include observations on teaching, course structure and course content as well as the examination process as a whole. The College provides feedback to external examiners in response to recommendations made within their reports.

**23. Indicators of Quality and Standards**

- External examiners reports
- The Postgraduate Quality Committee.

**24. Key sources of information about the programme can be found in**

- Postgraduate Prospectus, Imperial College London (available on-line <http://www.imperial.ac.uk/P1212.htm>)
- Imperial College Faculty of Medicine (<http://www1.imperial.ac.uk/medicine>)
- QAA Subject Review Report Imperial College of Science, Technology & Medicine ([www.qaa.ac.uk](http://www.qaa.ac.uk)).