

**Imperial College
London**



**WHO Collaborating Centre for Public
Health Training and Education**

Imperial College 'Advanced Health & Medical Research' Training Course



**WHO Collaborating Centre for Public Health Education and Training
Imperial College London
2014**

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The WHO Collaborating Centre for Public Health Education and Training Imperial College London was designated for such a function by the WHO Global Committee with the support of the British Government. The WHO Collaborating Centre is part of the Department Primary Care & Public Health, School of Public Health, Faculty of Medicine, Imperial College London. It is currently involved in several major international projects supporting countries in their health systems development, advancing academic institutions, enhancing the role of primary health care, strengthening human resource capacity including public health and clinical training and educational activities, improving institutional and individual quality and performance, addressing the escalating problem worldwide of non-communicable diseases, promoting public health principles and preparing countries for man-made and/or natural disasters through emergency preparedness and planning. The Centre's work focuses on health as complete physical, mental and social well-being and not merely the absence of disease. Our remit extends to many countries around the world and includes all six WHO Regions. The Centre continues to expand and has been increasingly active in strengthening primary care and public health through conference papers, workshops and networking, publications. Research has continued into human resource development, service quality, patient safety and public engagement. Consultancy work has focused on health system, human resource, and capacity development, academic advancement and disseminating good practice.

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Introduction

Modern Medical and Health Academia

Medical and health professionals in academia have a vital role in preparing the next generation of medical and other health professionals to deliver high quality health and healthcare services. They also play a major role in shaping the quality of services provided.

With the global rapid progression in medical technology and research, it is a challenge for health professionals, schools and colleges to ensure that all their academic staff and other health professionals are up-to-speed with the latest advancements, and today's organic curricula. Highly performing medical and health institutions are investing huge amount of resources in advancing the teaching, research skills and experience of their academic staff at all levels. As such, and at the request of the Ministry of Higher Education and Scientific research (MOHHSR) and the Ministry of Health (MoH) Iraq, Imperial College London and its WHO Collaborating Centre for Public Health Education and Training (ICL-WHO CC) have organized a two week bespoke short training course; tailored to develop and build the capacity of a cohort of Iraqi health professionals in Health & Medical Research. More explicitly, the goals of the short course are:

1. Provide an opportunity for participants to develop their research skills and capabilities; including writing and disseminating high-quality research.
2. Enable the participants to improve their aptitudes in teaching, training, and other educational roles (both at undergraduate and postgraduate level); including research methodology to the highest standards.
3. Advance the participants' leadership role in medical education; including modern management in medical schools, governance and stewardship.

Imperial College London

Consistently rated amongst the five world's best universities, Imperial College London is a science-based institution with a reputation for excellence in teaching, training and research. It attracts 14,000 students and 6,000 staff of the highest international quality. Innovative research at the College explores the interface between science, medicine, engineering and business, delivering practical solutions that improve quality of life and the environment - underpinned by a dynamic enterprise culture.

Since its foundation in 1907, Imperial's contributions to society have included the discovery of penicillin, the development of holography and the foundations of fibre optics. This commitment to the application of research for the benefit of all continues today, with current focuses including interdisciplinary collaborations to improve global health, tackle climate change, develop sustainable sources of energy and address security challenges.

In 2007, Imperial College London and Imperial College Healthcare NHS Trust formed the UK's first Academic Health Science Centre.

Imperial College London is fully committed to work with countries around the world to develop better health systems; preparing new generations of high quality and competent health professionals; building capacities through human resource development and finding solutions to current health problems - all aimed at improving the health of the populations and providing better health for all.

With that in mind, Imperial College London, through its WHO Collaborating Centre for Education and Training, has developed an innovative **Advanced Health & Medical Research Training Course** for medical and health professionals.

The 'Advanced Health & Medical Research' Training Course

The topics covered include:

Module 1: Research Methods

- Research design
- Biostatistics for research
- Systematic Review and Meta-Analysis
- Critical appraisal
- Engaging undergraduate students in research
- Choosing research topics
- Securing research funds
- Writing a research paper
- Excel in publishing in high-impact scientific journals

Module 2: Teaching & Learning Methods

- Learning styles
- Introduction to Problem Base Learning (PBL)
- Teaching infrastructures and settings
- Modern libraries and its contribution to academic excellence

Module 3: Academic Leadership & Governance

- Assessing Leadership styles
- Academic and research governance
- Medical and health research ethics
- Team working

Course Objectives

The programme aims to achieve the following learning objectives, where the participants will be able to:

- Describe the stages involved in developing and completing a research project successfully, and describe the purpose and content of a research protocol/proposal.
- Critically evaluate research papers so they can assess the value of the available evidence, and ensure it is incorporated into practice.
- Apply an evidence-based approach to the selection of outcome measures which are robust and practical.
- Become well versed with modern medical undergraduate teaching and assessment; including problem based learning which are student-centred in class, community and clinical settings
- Be able to write a research proposal / protocol; submit proposals for funding; conduct a research programme; writing a report / paper for publications; and disseminate the findings
- Become fully aware of ethical issues in research, and its regulations, for research ethical committee.
- Be well versed with research governance and clinical governance.
- Develop their leadership role in medical education and learn about modern management in medical schools; including, governance and stewardship.

Course Methods

All sessions incorporate mixed learning methods, including lectures, discussion and practical exercises. The searching the literature session is hands-on using computers, giving participants the opportunity to use the databases and undertake a small search during the session(s). Any statistics session is very practical and apart from basic maths, makes no assumptions about prior statistical knowledge.

Furthermore, the learning methods include:

- Interactive learning based on exercises, problem solving and role play.
- Setting up scenarios for Problem Based Learning.
- Use of modern library (including electronic access to literature, information and data).
- Assessment of each candidate learning styles.
- Assessment of each candidate leadership styles.

Material

Once enrolled all participants will receive:

1. Some of the course materials in advance. This will be supplemented by receiving a USB memory stick at the end of their course which will further include all the course material including hand-outs; presentation; case studies and tools; in addition to any further resources discussed as well as photos.
2. Information about the nine campuses of Imperial College London. On arrival each candidate will receive an Imperial College London ID card (to be returned by the end of the course), which will allow him/her access to all our facilities, including libraries, restaurants, cafes, etc.
3. Useful travel and tourist information about London, including transport, shopping and entertainment.

Evaluation

Evaluation of individual sessions, within each module, will be prompted on a daily basis; both quantitative and qualitative assessments of the content, delivery and effectiveness of each session will be assessed. A pre and post course knowledge-based evaluation will additionally be integrated.

Upon completion of the course, each candidate will receive the completion of course certificate from Imperial College London.

Cost

The Imperial College London WHO Collaborating Centre is a not for profit organisation which aims to fulfil WHO's mandate of 'better health through quality health and healthcare services delivered by competent and highly skilled workforce.'

The Program is planned for 20 participants, and the total cost will be £36,000 (i.e.: £1,800 per candidate). This includes developed and distributed training material; facilities provided; course delivery; official ICL-WHO CC certificate and Value Added Tax (VAT). It does not include accommodation, transport or other costs directly pertaining to the participants.

Candidates will be trained in various settings within the various Imperial College establishments, Imperial College NHS Trust Hospitals and NHS Primary care clinics.

While our NHS will provide emergency care free of charge, we strongly recommend that all participants should obtain travel insurance.