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of
GREENWICH

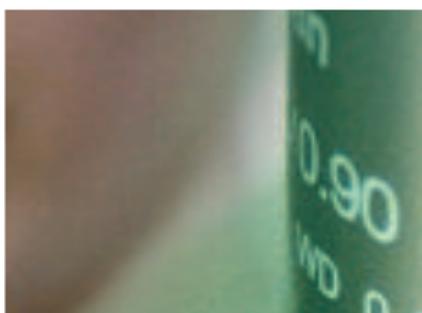
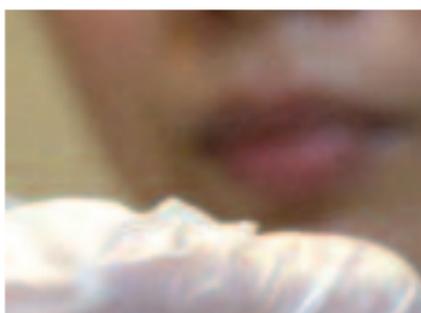


Gene Structure and Function

Twelve-week course starting April and October

BioMed Online Learning

www.greenwich.ac.uk/biomed



Gene Structure and Function

This course has been designed for:

- Biomedical scientists
- Clinical scientists
- Medical technical officers
- Healthcare scientists
- Nurses
- Pharmacists
- Doctors
- Allied health professionals

The use of DNA technology, coupled with a rapid rise in knowledge of the molecular basis of genetic disease, has transformed the specialty of clinical genetics and the practice of medicine.

When you have completed this course, you will be able to:

- Appreciate the overall complexity of genomes in humans and other organisms, and the nature of coding and non-coding sequences
- Understand the nature of genetic variation in humans
- Interpret genetic changes and predict their clinical outcome
- Use the Internet as a communication tool as well as a tool to find and evaluate information
- Produce reports to professional standards
- Produce materials for public presentation



Course Content

The course comprises two components:

Two face-to-face workshops

- Workshop 1: Introduction to WebCT, your tutor, and your course;
- Workshop 2: Course consolidation.

Guided online study of the following eight topics:

- **Structure of a gene** – nucleic acids – gene regulation
- **Genes in the Genome** – human genome project – non-coding DNA – genome databases
- **DNA to RNA to protein**
- **Inheritance** – major patterns of inheritance – carrier probabilities and recurrence risks for different pedigrees
- **Low penetrance genes** – linkage and association – basis of genetic disorders
- **How genes go wrong** – mutation classification – cellular effects
- **Genotype to phenotype** – underlying mechanisms
- **Cancer Genetics** – how genes cause cancer – how cells become tumorigenic

Study where you want, when you want, supported online by a tutor

- Take an accredited short course
- Gain 30 credits at Master's level
- Gain 100 Continuing Professional Development credits for portfolio and registration
- Can be used towards an IBMS accredited MSc in Biomedical Science (Online)

Biomed courses train you to:

- Use Internet-based applications
- Make effective presentations
- Use real-time chat rooms and discussion groups to support reflective learning

Biomed courses offer you:

- Online support from specialists in the field
- Online access to fellow students
- Self-assessment and quizzes to support your progress
- Rapid, meaningful feedback

The programme is accredited by the Institute of Biomedical Science.



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Return in envelope to:

Cathy Ronan

BioMed Administration Manager

Grey Building

Southwood Site

Avery Hill Campus

Avery Hill Road

Eltham

London SE9 2UG

Gene Structure and Function

Enquiries

Name

Company name

Please send me further information on the following course(s):

- Quality Systems Management
- Implementing Advanced Quality Management
- Management of Healthcare Associated Infection
- Point of Care Testing
- Robotics and Automation
- Gene Structure and Function
- Analysis of Nucleic Acids
- Bioinformatics
- Renal Disease
- Lung Disease
- Diagnosis of Breast Cancer
- WebCT Training for Course Creators

Address

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E-mail

Telephone



BioMed Online Learning

Grey Building
Southwood Site
Avery Hill Campus
Avery Hill Road
Eltham
London SE9 2UG

Telephone: 020 8331 9978

E-mail: biomed@gre.ac.uk



**This document is available
in other formats on request**

BioMed courses are owned by the BioMed Consortium, comprising 17 NHS Trusts, the Health Protection Agency and the University of Greenwich