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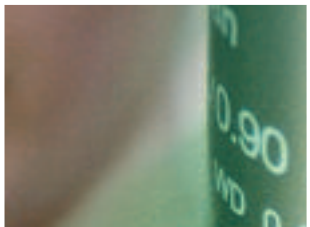
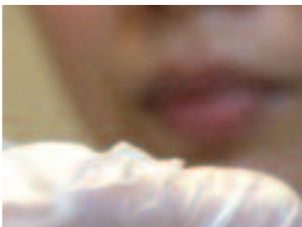
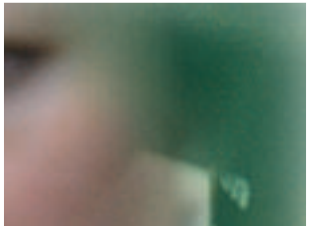
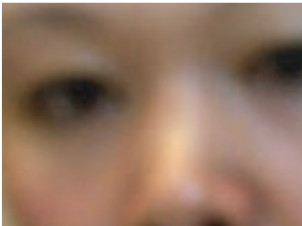


# Gene Structure and Function

Twelve-week course starting April and October

**BioMed Online Learning**

[www.greenwich.ac.uk/biomed](http://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:

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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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This document is available  
in other formats on request

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