

Serviço de Higiene e Epidemiologia Faculdade de Medicina do Porto	Department of Hygiene & Epidemiology University of Porto Medical School
Porto, 21-22 May 2009	

Curso de nivel intermedio Investigación en Epidemiología Molecular	Intermediate course Research in Molecular Epidemiology
Profesorado / Faculty: Miquel Porta	

Audience. Basically, junior researchers with some experience in doing research, epidemiologists with different background areas (nutrition, medicine, chemistry, environmental sciences), with an introductory knowledge of molecular biology and genetics.

Scope. We will aim at discussing why, when and how it is relevant and feasible to *integrate* the principles, concepts, findings, methods and techniques of epidemiology, molecular biology and the other health, life and social sciences; for instance, as relevant to the needs of the research projects that the students are already conducting or that they plan to conduct. This is not a course of “molecular biology for epidemiologists”. Biological concepts and findings (from molecular and cellular biology, genetics, etc.) will be addressed when they are relevant to the aims of molecular epidemiological research, to the “molecular epidemiological approach”.

Objective. To improve the ability of students to think, conceive, design, conduct, analyze and interpret research in molecular epidemiology that is both highly valid, and highly relevant –relevant either from a biological, from a clinical or from a public health perspective.

Language. The course will be given in English. Portuguese and Spanish will be used as needed.

Faculty. Miquel Porta, MD, MPH, PhD. Senior Scientist, Institut Municipal d'Investigació Mèdica; Professor of Preventive Medicine & Public Health, School of Medicine, Universitat Autònoma de Barcelona, Spain; and Adjunct Professor of Epidemiology, University of North Carolina at Chapel Hill, USA. <http://www.imim.es/URECMC/eng> (see section 'Scientific documents')
Tels.: +34 93 316 0700 / 93 316 0400. Email: mporta@imim.es

BASIC BIBLIOGRAPHY

A. Core textbooks in molecular epidemiology

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B. Reference textbooks in genetics and molecular biology

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- 3.– Nussbaum RL, McInnes RR, Willard HF, Thompson MW. *Thompson & Thompson genetics in medicine*. 6th. ed. Philadelphia: Saunders, 2001.

C. Glossaries

- 1.– Calafell F, Malats N. Glossary: Basic molecular genetics for epidemiologists. *J Epidemiol Community Health* 2003; 57: 398-400 (part 1). Malats N, Calafell F. Basic glossary on genetic epidemiology. *J Epidemiol Community Health* 2003; 57: 480-482 (part 2). Malats N, Calafell F. Advanced glossary on genetic epidemiology. *J Epidemiol Community Health* 2003; 57: 562-564.
- 2.– Susser MW. Glossary: causality in public health science. *J Epidemiol Community Health* 2001; 55: 376-378.
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- 7.– Rychetnik L, Hawe P, Waters E, et al. A glossary for evidence based public health. *J Epidemiol Community Health* 2004; 58: 538-545.
- 8.– Bhopal R. Glossary of terms relating to ethnicity and race: for reflection and debate. *J Epidemiol Community Health* 2004; 58: 441-445.
- 9.– Barker DJP. Glossary: Developmental origins of adult health and disease. *J Epidemiol Community Health* 2004; 58: 114-115.
- 10.– Kuh D, Ben-Shlomo Y, Lynch J, et al. Glossary: Life course epidemiology. *J Epidemiol Community Health* 2003; 57: 778-783.

See also: Oxford Reference Online: www.oxfordreference.com

D. Selection of articles of reference

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