

**IARC SUMMER SCHOOL ON
CANCER EPIDEMIOLOGY**

Module 1

CANCER REGISTRATION

2-6 June 2008

Monday 2 June 2008

08h30	Registration	
09h00	Official Opening	Peter Boyle
	Introduction of teaching staff and participants	Mary Heanue
09h45	Cancer registration and its role in epidemiology	Paolo Boffetta
10h15	Cancer registration: basic principles	Maria Paula Curado
11h00	COFFEE BREAK	
11h30	Sources of disease information	April Fritz
12h00	International Classification of Disease (ICD-O)	April Fritz
13h00	LUNCH	
14h00	Introduction to cancer staging	April Fritz
15h15	TEA BREAK	
15h45	Staging exercise	April Fritz
17h00	Group work CI5 exercise	Mary Heanue
18h00	WELCOME RECEPTION	

Tuesday 3 June 2008

09h00	Seminar	
10h30	COFFEE BREAK	
11h00	Abstracting, coding, staging, basis of diagnosis -1 Breast, Lung	April Fritz
13h00	LUNCH	
14h00	Abstracting, coding, staging, basis of diagnosis -2 Oesophagus, stomach, colon, rectum	April Fritz
15h15	TEA BREAK	
15h45	Abstracting, coding, staging, basis of diagnosis -3 Cervix, prostate and bladder	April Fritz
17h00	Pathology and cancer	Lars Egevad
17h30	Group work	Mary Heanue

Wednesday 4 June 2008

09h00	CanReg4 1	Morten Ervik
11h00	COFFEE BREAK	
11h30	CanReg4 2	Morten Ervik
13h00	LUNCH	
14h00	CanReg4 3	Morten Ervik
15h15	TEA BREAK	
15h45	Measurement of disease occurrence, data presentation	Paolo Boffetta
16h45	Epi exercise	Mary Heanue
17h15	Group work and CanReg exercises	Mary Heanue/ Morten Ervik

Thursday 5 June 2008

09h00	Basic information required and variable definitions	Hai Rim Shin
10h00	Data collection form	Maria-Paula Curado
11h00	COFFEE	
11h30	Where to find cases, quality control and completeness	Maria-Paula Curado
13h00	LUNCH	
14h00	Cancer control and cancer registration (NCR)	Hai Rim Shin
15h30	TEA BREAK	
16h00	Follow up and survival Confidentiality, ethical and legal issues	Mary Heanue
17h00	International Association of Cancer Registries (IACR)	Isabelle Savage
17h15	Group work and CanReg exercises	Mary Heanue/ Morten Ervik

Friday 6 June 2008

09h00	ICD-O coding exercise	April Fritz
10h00	Writing an annual report, press statement, poster	John Daniel/ Nicolas Gaudin
11h00	COFFEE BREAK	
11h30	Multiple primaries, indices of data quality	April Fritz/ Mary Heanue
13h00	LUNCH	
14h00	Presentation of group work	Mary Heanue
15h30	TEA BREAK	
16h00	Course evaluation and conclusion	Mary Heanue
17h00	CLOSURE	



IARC SUMMER SCHOOL ON CANCER EPIDEMIOLOGY

International Agency for Research on Cancer
Lyon, France

2 – 27 June 2008

P R O G R A M M E

Introduction to Cancer Epidemiology

9 to 20 June 2008

SECRETARIAT

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Director, IARC Summer School

Ms Mary Heanue

Scientific Co-Directors

Professor Jon Wakefield
Professor Tongzhang Zheng

Course Assistant

Mrs Sue Anthony

Course Secretaries

Mrs Karima Abdedayem
Miss Sylvia Moutinho

With the support of the:

Environmental Cancer Risk, Nutrition and Individual Susceptibility
Network of Excellence (ECNIS)
International Atomic Energy Agency (IAEA)
National Cancer Institute, USA (NCI)

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Dr Fabrizio Giannandrea

Dr Julia Heck

Miss Clarisse Hery

Dr Farhad Islami

Miss Clémentine Joubert

Dr Yuan-Chin Amy Lee

Dr Marcin Lener

Dr Ni Li

Dr Esther Lips

Ms Anne Manchanda

Mrs Manuela Marron

Ms Joanna Matyjasik

Mr Anthony Montella

Mr Richard Muwonge

Mrs Ann Olsson

Dr Therese Truong

**INTRODUCTION TO
CANCER EPIDEMIOLOGY**

9 to 20 June 2008

Monday 9 June 2008

08h30	Registration	
09h00	Official Opening	
	Introduction of teaching staff and participants	Paolo Boffetta/ Mary Heanue
09h30	Introduction to biostatistics – 1	Graham Byrnes
10h30	COFFEE BREAK	
11h00	Introduction to cancer biology	Magali Olivier
12h00	Descriptive cancer epidemiology - 1	Tong Zheng
13h00	LUNCH	
14h00	Overview of study design	Paolo Boffetta
15h30	TEA BREAK	
16h00	Descriptive cancer epidemiology - 2	Tong Zheng
17h00	Introduction to PubMed	Sharon Grant/ Paolo Boffetta
18h00	Welcome Reception	

Tuesday 10 June 2008

09h00	Intervention studies	R. Sankaranarayanan
10h30	COFFEE BREAK	
11h00	Introduction to biostatistics – 2	Graham Byrnes
12h00	Measures of occurrence	Eric Duell
13h00	LUNCH	
14h00	Biostatistics practical - 1	Graham Byrnes
15h30	TEA BREAK	
16h00	Intervention studies (paper)	R. Sankaranarayanan
17h00	Subgroup work	Paolo Boffetta/ Mary Heanue

Wednesday 11 June 2008

09h00	Principles of screening	Philippe Autier
10h30	COFFEE BREAK	
11h00	Cancer survival	Philippe Autier
12h00	Screening (paper)	Philippe Autier
13h00	LUNCH	
14h00	Standardisation (practical)	Tong Zheng
15h30	TEA BREAK	
16h00	Cancer control	R. Sankaranarayanan
17h00	Subgroup work	Paolo Boffetta/ Mary Heanue

Thursday 12 June 2008

09h00	Introduction to biostatistics - 3	Graham Byrnes
10h30	COFFEE BREAK	
11h00	Measures of association	Eric Duell
12h00	Cross-sectional studies	Tong Zheng
13h00	LUNCH	
14h00	Measures of association and occurrence (practical)	Eric Duell
15h30	TEA BREAK	
16h00	Introduction to biostatistics - 4	Graham Byrnes
17h00	Subgroup work	Paolo Boffetta/ Mary Heanue

Friday 13 June 2008

09h00	Cohort studies - design	Paolo Boffetta
10h30	COFFEE BREAK	
11h00	Cohort studies – basic analysis	Paolo Boffetta
12h00	Genetic epidemiology	Mia Hashibe
13h00	LUNCH	
14h00	Overview of bias	Paolo Boffetta
15h30	TEA BREAK	
16h00	Cohort studies (paper)	Paolo Boffetta
17h00	Subgroup work	Paolo Boffetta/ Mary Heanue

Monday 16 June 2008

09h00	Case-control studies – design	Tong Zheng
10h30	COFFEE BREAK	
11h00	Case-control studies – basic analysis	Tong Zheng
12h00	Exposure assessment	Kurt Straif
13h00	LUNCH	
14h00	Case-control study (paper)	Tong Zheng
15h30	TEA BREAK	
16h00	Cohort studies (practical)	Paolo Boffetta
17h00	Subgroup work	Paolo Boffetta/ Mary Heanue

Tuesday 17 June 2008

09h00	Internal seminar	
10h30	COFFEE BREAK	
11h00	Introduction to biostatistics – 5	Graham Byrnes
12h00	Attributable risk	Gary Clifford
13h00	LUNCH	
14h00	Biostatistics practical - 2	Graham Byrnes
15h30	TEA BREAK	
16h00	Methods of data presentation	Tong Zheng
17h00	Subgroup work	Paolo Boffetta/ Mary Heanue

Wednesday 18 June 2008

09h00	Conducting an epidemiological study - 1 (writing a protocol, grant application)	Mia Hashibe
10h30	COFFEE BREAK	
11h00	Effect modification	Tong Zheng
12h00	Confounding	Tong Zheng
13h00	LUNCH	
14h00	Conducting an epidemiological study - 2 (organise field work, sample size, power in low- and medium-resource countries)	Mia Hashibe
15h30	TEA BREAK	
16h00	Case-control studies (practical)	Tong Zheng
17h00	Subgroup work	Paolo Boffetta/ Mary Heanue

Thursday 19 June 2008

09h00	Molecular epidemiology	Paolo Boffetta
10h30	COFFEE BREAK	
11h00	Causal inference, occupational and environmental cancer	Kurt Straif
12h00	Combining epidemiological results	Paolo Boffetta
13h00	LUNCH	
14h00	Multivariate analysis	Mathieu Boniol
15h30	TEA BREAK	
16h00	Multivariate analysis (practical)	Mathieu Boniol
17h30	Subgroup work	Paolo Boffetta/ Mary Heanue

Friday 20 June 2008

09h00	Presentation of projects - 1	Paolo Boffetta/ Mary Heanue
10h30	COFFEE BREAK	
11h00	Presentation of projects - 2	Paolo Boffetta/ Mary Heanue
13h00	LUNCH	
14h00	Infection and cancer	Hugo De Vuyst
14h45	Causal inference (paper)	Kurt Straif
15h30	TEA BREAK	
16h00	Diet and cancer: specific features and methodological issues	Nadia Slimani
16h45	Course evaluation	Paolo Boffetta
17h30	CLOSURE	



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P R O G R A M M E

***Methodological Issues in the Design and
Analysis of Gene and Environment Studies***

23 to 27 June 2008

SECRETARIAT

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**METHODOLOGICAL ISSUES
IN THE DESIGN AND ANALYSIS
OF GENE AND ENVIRONMENT
STUDIES**

23 to 27 June 2008

Monday 23 June 2008

08h30	Registration	
09h00	Opening remarks	Peter Boyle/ Paolo Boffetta/ Jon Wakefield
09h30	Preliminaries for genetic data analysis (basic genetics/ linkage and linkage disequilibrium/measures of LD)	David Balding
10h45	COFFEE BREAK	
11h15	Genetics of complex diseases (common disease common variant hypothesis/types of genetic variation/linkage analysis versus association studies)	David Balding
12h30	LUNCH	
14h00	Genetic epidemiology and risk factor epidemiology: convergences and divergences	George Davey Smith
15h15	TEA BREAK	
15h45	An introduction of the R software	Martyn Plummer/ Jon Wakefield
17h00	WELCOME RECEPTION	

Tuesday 24 June 2008

09h00	Tagging SNPs/Genotyping technologies	James McKay
10h15	COFFEE BREAK	
10h45	Genetic data QC steps	Jon Wakefield
12h00	LUNCH	
13h15	Mendelian Randomization: how genetic epidemiology contributes to understanding determinants of disease	George Davey-Smith
14h30	Practical: QC using R	Jon Wakefield
15h45	TEA BREAK	
16h15	The plink software	James McKay

Wednesday 25 June 2008

09h00	Single-point analysis methods	Jon Wakefield
10h15	COFFEE BREAK	
10h45	More complex analysis methods	David Balding
12h00	LUNCH	
13h15	Practical: association tests and population structure	David Balding/ Jon Wakefield
14h30	Understanding determinants of phenotypic variation: a gloomy prospect?	George Davey-Smith
15h45	TEA BREAK	
16h15	R Practical	Jon Wakefield

Thursday 26 June 2008

09h00	Lessons from candidate gene and genome-wide studies of lung cancer	Paul Brennan
10h15	COFFEE BREAK	
10h45	Bayesian methods	Jon Wakefield
12h00	LUNCH	
13h15	Interactions	Clare Weinberg
14h30	Mapping based on SNP markers measured in families and hybrid designs, including maternal effects and imprinting	Clare Weinberg
15h45	TEA BREAK	
16h15	Practical: family analyses	Clare Weinberg/ Jon Wakefield

Friday 27 June 2008

09h00	Finding risk-related haplotypes and estimating relative risks for candidate haplotypes	Clare Weinberg
10h15	COFFEE BREAK	
10h45	Gene environment interaction, drinking and smoking as examples	James McKay
12h00	LUNCH	
13h15	What have we learnt from studies of gene-environment interactions?	Paolo Boffetta
14h30	Final thoughts. Questionnaires	
15h45	TEA BREAK	
16h15	Closure/Evaluations	Paolo Boffetta