



Welcome to the Master's Open Day Master of Epidemiology

Leo Schouten
Programme coordinator

Leo Schouten, PhD

Programme coordinator Master of Epidemiology

- Medicine (1975-1981)
- PhD in Cancer Epidemiology (1996)
- Head of Cancer Registry (1983-2000)
- Associate Professor in Cancer Epidemiology, UM (2000-)
main research focus: causes and prognosis of cancer



Martijn Bours, PhD

Vice-programme coordinator Master of Epidemiology

- BSc Physiotherapy (1994-1999)
- MSc Human Movement Sciences (1999-2001)
- PhD in Epidemiology (2007)
- Assistant Professor in Epidemiology, UM (2007-)
Main research focus: quality of life in cancer survivors



Content

- What is Epidemiology about?
- Main themes
- Course outline & details
- What the future might bring
- Meet (former) students

Intermezzos

With examples of our own research



Epidemiology

"A fascinating field using statistics, tracking methods and problem solving to study the causes and course of diseases and the effect of clinical interventions in a community"

Why?

- It is fundamental to improving public health
- Collaboration with many different scientific disciplines
 - It is about real-life

Intermezzo: 'smoking and cancer'

- Associated with increased risk of many types of cancer, e.g.:
 - Lung cancer
 - Head & neck cancer
 - Bladder cancer
 - Renal cell cancer, etc
- There is one cancer with a **decreased** risk...
- Analysis using data from the Netherlands Cohort Study on diet and cancer, one of the large population studies of our department

Smoking and endometrial cancer



Smoking status	Relative Risk	95% CI
Never	reference	reference
Former	-17%	-42 to +20%
Current	-41%	-60 to -12%

Loerbroks et al, Cancer Causes Control, 2007

Explanation and implications?

Why Epidemiology in Maastricht?



- One-year master
- A general, solid theoretical, methodological, and statistical basis for designing and implementing research projects
- The opportunity to conduct an impactful research project under the guidance of a personal supervisor
- A stimulating international academic environment
- Lectures by prominent renowned scientists and professors

Why Maastricht: two choices



Master of Epidemiology, 1 year full-time

Master of Epidemiology, 2 years part-time

Main topics of master

- Courses on:*
- Observational Research
 - Intervention Research
 - Advanced Statistical Analyses
 - Clinimetrics
 - Genetic and Molecular Epidemiology
 - Systematic Literature Review and Meta-analysis
 - Writing a research protocol
 - Internship and these

Course outline / Epidemiology full-time

Period	Education at: Tuesdays	Fridays	Weeks
1	Introduction to Epidemiology 3 ECTS		1
1	Observational Research 6 ECTS	Intervention Research in Health Care 5 ECTS	7
2	Advanced Statistical Analysis Techniques 6 ECTS	Writing a Research Question and outline 1 ECTS	8
2		Clinimetrics 5 ECTS	8
3	Applied Epidemiology 3 ECTS	Molecular and Genetic Epidemiology 3 ECTS	4
4	Writing a Research Protocol 4 ECTS	Systematic Literature Review 6 ECTS	8
5&6	Master Research and Thesis 18 ECTS		12

Course outline / Epidemiology part-time

Year	Period	Education at: Tuesdays	Fridays	Weeks
1	1	Introduction to Epidemiology 3 ECTS		1
	1	Observational Research 6 ECTS		7
	2	Advanced Statistical Analysis Techniques 6 ECTS	Writing a Research Question and Outline 1 ECTS	8
	3	Applied Epidemiology 3 ECTS		4
2	4	Writing a Research Protocol 4 ECTS		8
	5&6	Master Research and Thesis 18 ECTS		12
	1		Intervention Research in Health Care 5 ECTS	7
	2		Clinimetrics 5 ECTS	8
3	3		Molecular and Genetic Epidemiology 3 ECTS	4
	4		Systematic Literature Review 6 ECTS	8
	5&6	Master Research and Thesis 18 ECTS		12



Programme details

- Problem-based learning
 - Small groups under supervision of teachers
- Lectures
- Practicals
- Writing skills
- Presentations
- Internship with intensive supervision



Visitation & accreditation

- **Master of Epidemiology** recognized for registration as 'epidemiologist A' by the Netherlands Epidemiological Society (april 2018)
Link: www.epidemiologie.nl

- Positive assessment by the QANU (april 2018)
Link: https://search.mvaio.net/files/5c62d72b52292_007490%20rapport%20UM%20wo-ma%20Epidemiology.pdf



Evaluation (2013-2018)

own evaluation



	Grade	Scale
Grade program in general	7.3-8.1	1-10
If I was to start all over again, I would choose for this programme	3.7-4.4	1-5
The supervisor was an expert in the topic	4.2-4.6	1-5
Grade functioning supervisor	8.3-8.6	1-10



Evaluation NSE (2019)
Nationale Studenten Enquête

Link: <http://www.studiefocus22.nl/opleidingen/17328-epidemiology-maastricht-university-wo-master>



	Grade	Scale
Study in general	4.0	1-5
I would recommend the study to others	4.0	1-5
Theme score: contents	4.0	1-5
Theme score: skills	4.1	1-5
Theme score: scientific building	4.3	1-5
Theme score: teachers	4.3	1-5



Intermezzo: 'interval breast cancer'

- In 1990 breast cancer screening programme was started in the Netherlands
- Aim to reduce breast cancer mortality
- Women aged 49 to 74 are invited once every two years;
- Mammograms are read by two radiologists independently
- But cancers can be missed...



Re-evaluation of interval cancers

Missed by two screening units: 66%

Detected by two screening units: 16%

Detected by one screening unit: 18%

N = 87

De Rijke JM, Schouten LJ, et al. J Med Screening 2000; 7: 19-23.

Career perspectives

- PhD student**
 - As PhD student
- Research and teaching**
 - Universities, hospitals
 - Pharmaceutical companies
 - National institutes like TNO, RIVM
- Health policy**
 - Local, regional or national level
 - e.g. municipal health services

See the list of job titles of our alumni at the information market

A selection of PhD theses from our students

Vacancies

Medécins Sans Frontières

ARTSEN ZONDER GRENZEN

Position Description

Epidemiologist

Client: MSF Holland

Department:

Salary:

[Apply Now](#)

Job Brief

You work as an epidemiologist who will be very diverse. Your responsibilities may include gathering epidemiological data (including active case finding) during disease outbreaks.

Your job

You work as an epidemiologist who will be very diverse. Your responsibilities may include gathering epidemiological data (including active case finding) during disease outbreaks.

This could be for such diseases as meningitis, measles or cholera. Your work will help direct teams to their response, including case management, vaccination and/or water and sanitation interventions. You may also conduct mortality and outbreak surveys, set up and maintain monitoring and surveillance systems, carry out operational research, and provide epidemiological support to complex projects in order to enhance evidence-based decision making.

Vacancies

PHARMO

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(Junior) Onderzoeker

Home > Vacancies > (Junior)Onderzoeker

(Junior) Onderzoeker

De **(Junior) Onderzoeker** is in dagelijkse werkhouding bezig met het in samenwerking uitvoeren van analyses en (overloop)rapporten uit onder andere statistische analyses, gegevensverwerking en literatuuronderzoek. De resultaten van het onderzoek worden overgenomen in rapporten of wetenschappelijke publicaties. Je draagt bij aan verzoeken op één of meer themagebieden en bent resultaat gericht.

De **afdeling Onderzoek** maakt gebruik van methoden en technieken op het gebied van de klinische epidemiologie en farmaco-epidemiologie in het bijzonder, de statistiek en bioinformatica, die klinisch onderzoek en postmarketing surveillance, de farmaco-economie en gezondheids-economie betreffen en maatschappelijke gezondheidsonderzoek.

Wij zoeken een collega die:

- een academische opleiding in de geneeskunde, farmacie of gezondheidswetenschappen (studie farmacie is een plus) succesvol heeft afgerond,
- ervaring heeft op het gebied van epidemiologisch/biometrisch onderzoek en kennis heeft van statistiek en geïntegreerde software (bijna van SAS is een plus),
- een goede beheersing heeft van de Engelse taal en goede schriftelijke communicatieve vaardigheden (wetenschappelijke publicatie) is een plus heeft,
- kan meedelen met en helder inhoudelijk oog heeft voor de ontwikkeling van relevante terreinen in de gezondheidszorg,
- intergerichte communicatie en aanpak is ingesteld,
- zich herkent in de volgende eigenschappen: betrokken, doortastend, creatief, werkt op duidelijke, humane, flexibele.

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Maastricht University **Go the extra mile**

Vacancies **PhD position Radboud UMC**

← All jobs

PhD candidate Tuberculosis and Diabetes in Uganda & Tanzania

Published: 17 Oct | Deadline: 10 Nov | Location: Nijmegen

You cannot apply for this job anymore. Browse the [current job offers](#) or choose an item in the top navigation above.

Specifications

- PhD
- Health
- max. 36 hours per week
- University graduate
- 309164-P509422-1

Employer

Radboudumc
university medical center

Maastricht University **Go the extra mile**

Vacancies **Clinical Study Researcher Danone**

Clinical Study Researcher
Danone • Utrecht, NL

This job is no longer accepting applications

Do you have the enthusiasm and drive to use your scientific and methodological expertise in clinical research projects in humans? Would you like to have an impact on the health of vulnerable persons by delivering credible evidence for our nutritional solutions? Then this might be just what you are looking for! Make sure to apply now to join our team based in Utrecht, the Netherlands.

Your mission:
You will use your methodological and scientific expertise in different phases of a clinical study in humans ranging from the early phase of translating business needs in the right study design to writing the clinical study report and being involved in writing scientific publications.

As a Clinical Study (CS) Researcher, you will be a member of the Clinical

Industry: Consumer Goods, Food & Beverages, Food Production

Employment Type: Full-time

Job Functions: Research, Analyt., Information Technology

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Admissions

- University bachelor in a relevant domain
- University of Applied Sciences bachelor in a relevant domain
 - + sufficient background in methodology and statistics
 - + possibly GRE-test
- Requirements regarding English language may apply
- See Admissions stand and website for additional information

Application deadlines to start in September 2019

- Students who apply for a UM-wide scholarship up to and including 1 February 2020
- Non-EU/EEA-students up to and including 1 May 2020
- EU/EEA-students up to and including 1 June 2020

Admission related questions?
Please visit the stand from the Board of Admission at the information market for a personal talk with our staff members

Maastricht University

Maastricht University **Go the extra mile**

Meet...
a former student

Karlijn Hermans

Educational background

- BSc Medical Imaging and Radiation Therapy (2011-2015)
- Premaster Biomedical Sciences (2015-2016)
- MSc Global Health (2016-2017)
- MSc Epidemiology (2017-2018)

Why did I choose the Epidemiology Master?

- To extend knowledge on quantitative research methods
- To gain more experience in using statistical analysis techniques
- 1 year program

Current Position

- PhD Candidate at the department of Epidemiology (since September 2018)

What do I do?

- Research! Write articles and conduct analyses
- Educational tasks – tutor roles
- Follow PhD courses – in cancer epidemiology, statistics, academic writing, etc.
- Visit conferences (national/international), and present findings

Current project

- Studying the aetiology of Cancer of Unknown Primary (CUP) tumour origin

Maastricht University

How to study the aetiology of Cancer of Unknown Primary (CUP)?



Cancer of Unknown Primary (CUP) is a metastasised epithelial malignancy with no identifiable primary tumour origin during a patient's life. The overall median survival is only **three months**.



- Use a large prospective cohort (N=120,852)
- Questionnaire on cancer risk factors was completed at baseline (1986)
- Cancer follow-up (20.3 years) through record linkage to the Netherlands Cancer Registry and nationwide Dutch Pathology Registry
- Which lifestyle factors are associated with overall CUP risk?



We are currently studying the association between **alcohol consumption, tobacco smoking, and overall CUP risk**

• Participants who drank **≥30 grams of ethanol per day**, compared to abstainers, were at a **1.57 increased risk** for developing **overall CUP** (after adjustment for potential confounders).



• Participants who smoked **≥20 cigarettes per day**, compared to never smokers, were at a **1.42 increased risk** for developing **overall CUP** (after adjustment for potential confounders).



Meet...

a current student



Hi, my name is Mina from Serbia, **Epidemiology master's student**

Follow me on Instagram and find out more about my study experiences and my life in Maastricht!

[extramile_mina](#)



Questions?



Contact information

Leo Schouten

lj.schouten@maastrichtuniversity.nl

+31 43 388 2390



Martijn Bours

m.bours@maastrichtuniversity.nl



Good luck with your study selection and see you in Maastricht!

+31 (0)43- 388 5798

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