

# BOOST CAREER WITH ONLINE TRAINING IN DRUG SAFETY

SHORT COURSES / CERTIFICATES / MASTER / PhD



#### Discover the Eu2P programme

Find the Eu2P course that fits your real needs  Gain rapid and accurate expertise through the Eu2P short courses  Improve your professional competencies through the Eu2P academic Certificate diploma  Strengthen your profile through the Eu2P Master of Science  Deepen your knowledge through the Eu2P PhD degree  Apply on-line for a Eu2P training programme  11  29  47	Choose the Eu2P online and on-the-job training	5
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# THE Eu2P TRAINING OFFER

### Choose academic awards designed by a strong Consortium!



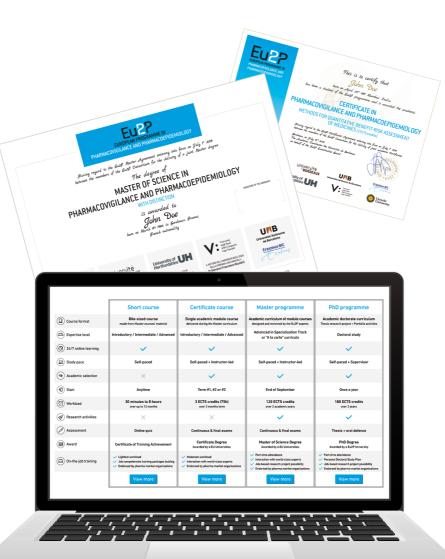
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2 Regulatory Agencies



15 Pharmaceutical Companies



#### The Eu2P training offer

Eu2P offers courses in pharmacovigilance and pharmacoepidemiology delivered and updated by a strong partnership of six universities coordinated by the University of Bordeaux.

### Eu2P offers academic courses recognised by private and regulatory experts:



#### **Short courses**

Short courses of 30 minutes to 6 hours on hot topics or focused on your needs, available over one year



#### 25 stand-alone certificates

A standard module that runs over 3 months and leads to an academic Certificate



#### Master programme

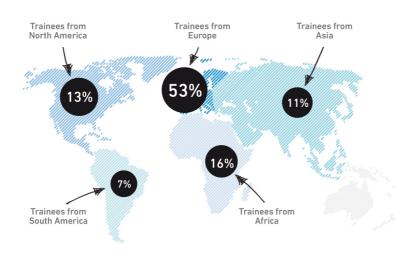
A postgraduate curriculum in one or two years associated to a research project that leads to a Master of Science degree



#### PhD programme

A thesis in three years associated to a postgraduate curriculum that leads to a PhD degree

### Choose the course that best fits your profile!







73%

Eu2P provides flexible and modular courses through its web-based platform.

Each trainee is identified and is granted access rights to the e-Learning platform tools and resources in order to interact with trainees and trainers.

### By choosing Eu2P, you can learn anytime, anywhere, anypace!

#### Eu2P is designed:



For healthcare professionals



For graduate and postgraduate students in Health and Life Sciences



For non-specialist professionals



For companies, regulatory agencies and academic institutions

# THE Eu2P COURSE CURRICULUM OFFER

#### Course domains

<b>D1 -</b> Basics for pharmacovigilance and pharmacoepidemiology	14
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#### Eu2P Domain 1

### Basics for pharmacovigilance and pharmacoepidemiology

Directed by the University of Bordeaux

#### Course objectives

#### Introductory level modules

- To make the trainees familiar and able to understand the main epidemiological and statistical principles, concepts and tools used in pharmacovigilance and pharmacoepidemiology practices and research
- To train on the main health indices used to describe mortality and morbidity of the population
- To learn the principles used to design and appraise observational studies
- To master basics concepts on how to communicate written and oral scientific results

#### Academic course offer in Domain 1

1. Basics in epidemiology

- Descriptive epidemiology (person, place and time)

- Observational studies in pharmacoepidemiology

- Biases in pharmacoepidemiology studies
- Causality criteria, evidence level and critical reading

Offered as



or



#### 2. Basics in statistics

- Introduction to statistics and probability

- Estimates

- Statistical testing

- Introduction to multivariable linear regression

#### 3. Valorisation and critical appraisal in research

- Critical reading of scientific literature: clinical trials and observational studies
- Principles of the redaction of scientific papers and reports
- Principles of scientific posters and oral communication
- Introduction to scientific watch: principles and techniques
- Presentation of the main institutions in Health Sciences
- Principles for research funding

Offered as

**C** Certificate

or

Master (Y1) module

Certificate

or

M Master (Y1) module



# Benefit assessment of medicines

Directed by the Autonomous University of Barcelona

#### Course objectives

#### Introductory level module

- To understand the need of benefit assessment of medicines in order to fulfil patients' needs
- To develop a general knowledge of the clinical, pharmacological and epidemiological principles underlying medicines prescribing and use
- To review and become familiar with the clinical, pharmacological and epidemiological basis of medicines effects evaluation
- To understand the clinical, pharmacological and epidemiological principles of the evaluation of medicines efficacy and effectiveness

#### Intermediate and advanced level modules

- To know the scientific principles underlying the decision making process of prescribing
- To know the methods used in epidemiological studies and in randomised clinical trials to assess the efficacy and effectiveness of medicines
- To be aware of the limitations of scientific evidence in the benefit assessment of medicines
- To discuss and analyse the need to solve therapeutic uncertainties through clinical research

#### Offered as

#### 1. Basics in clinical pharmacology

- Clinical pharmacology: aims and uses in the therapeutics
- Clinical pharmacology and epidemiological evaluation of medicine effects

- The randomised clinical trials (RCT) as a method for assess the efficacy of medicines

- Basics for RCT appraisal: extrapolation of RCTs results to clinical practice

#### C Certificate

Master (Y1) module

#### 2. Clinical and pharmacological principles

- Patients' therapeutic needs, medicines and society
- Patients, physicians, information and prescribing
- Clinical and pharmacological basis of therapeutics
- Variability in medicines response
- Therapeutics and medicines prescribing of medicines for selected health problems
- C Certificate

- Master (Y2) module
- D PhD module

#### 3. Methods in clinical research, pharmacoepidemiology and in the assessment of the efficacy of medicines

- Scientific methods and causality
- Statistical and methodological issues for the design and analysis of clinical trials

- Ethical issues in the development of clinical research and clinical trials

- Systematic review and meta-analysis of randomised clinical trials
- Other methods for the evaluation of the effectiveness of medicines and therapeutic interventions

C Certificate

- Master (Y2) module
- D PhD module

#### 4. Critical appraisal of clinical trials: evidence-based medicine and its uncertainties

- Randomised clinical trials limitations
- Evidence-based medicine and its limitations
- Critical appraisal of randomised clinical trials limitations
  - Critical appraisal of a meta-analysis of randomised clinical trials
  - From therapeutic uncertainty to a research protocol

Certificate

Master (Y2) module

D PhD module

Introductory level
 Intermediate level
 Advanced level



#### Eu2P Domain 3

## Medicines pharmacovigilance and regulatory aspects

Directed by the University of Hertfordshire

#### Course objectives

#### Introductory level module

To enable trainees to develop an understanding of the principles of pharmacovigilance from the development of the science to its place in pre and post-authorisation environment and the roles of various stakeholders within pharmacovigilance

#### Intermediate level modules

- ∑ To develop an understanding of European, USA, Japanese and major local and worldwide regulations and guidelines concerning pharmacovigilance. Emphasis is placed on the problems of interpretation of pharmacovigilance regulations both pre- and post-authorisation
- To enable participants (specialists) to develop an understanding of the requirements of Pharmaceutical Industry of the operational aspects of pharmacovigilance as it relates to the preparation of documents legally required by regulatory bodies.
  - Focus is on the adverse event reporting process within Industry, placed within the context of regulatory requirements and best practice

Offered as

#### 1. Principles of pharmacovigilance

- Introduction to Pharmacovigilance principles

- Safety evaluation during a products lifecycle

- Labelling and risk management

C Certificate

Master (Y1) module

#### 2. Pharmacovigilance regulations

- Pharmacovigilance regulations: concept

- The working Pharmacovigilance regulations

- Other related Pharmacovigilance regulations and quidelines

- Pharmacovigilance regulations

**C** Certificate

Master (Y2) module

PhD module

#### 3. Pharmacovigilance regulatory processes

- Case reporting

- Periodic reporting

- Product Labelling and Risk Management Plans

- Contractual arrangements

C Certificate

Master (Y2) module

D PhD module



# Medicines risk identification and quantification

Directed by the Erasmus Medical Center of Rotterdam and the University Medical Center of Utrecht

#### Course objectives

#### Intermediate and advanced level modules

To enhance knowledge about and make the trainees capable of identifying and quantifying risks of medicines and to interpret publications and study results

#### Academic course offer in Domain 4

Offered as

- 1. Principles of identifying and recognising adverse events and safety signals
  - Definition of adverse drug reactions type of ADRs
  - Detection and recognition of adverse events in clinical trials
  - Adverse event coding principles and differences
    - Spontaneous reporting databases
    - Principles of signal detection on electronic health care databases
    - Risk management plans

C Certificate

or

Master 1/2 module or

PhD module

#### Offered as

#### 2. Substantiation and quantification of risks

- Introduction: from case based reasoning to population based reasoning, examples: H1N1 vaccination, Yellow fever vaccine
- Designing a study: study designs, basic epidemiological measures, data sources, workflow to quantify risks, case and exposure identification, codes of conduct, writing a protocol
- Designing a study II: Causality from different perspectives, Causal diagrams, and Building a Statistical Analysis Plan
- Raw Data to Metrics: Elementary and advanced analysis methods with an introduction to data analysis in R
- Communication of results: communication with academia. regulators, pharmaceutical industry, writing a pharmacoepidemiological paper

#### C Certificate

or

M Master (Y2) module

or

D PhD module

#### 3. Identifying susceptibility for adverse drug reactions

- Introduction, risk factors and effect modification
- Variability in drug response and principles of pharmacogenetics/pharmacogenomics
- Assessment of pharmacogenetic influence through candidate genes and genome-wide association studies (GWAS)
  - Ongoing initiatives and biological interpretation
  - Successes and failures in pharmacogenetic studies

Certificate

Master (Y2) module

PhD module



#### Fu2P Domain 5 Medicines benefit-risk assessment

Directed by the University of Utrecht

#### Course objectives

#### Introductory level module

To obtain overview/basic insight into benefit-risk assessment methods (including pharmacoeconomics), the process of decision making on medicines

#### Intermediate and advanced level modules

- To obtain detailed insight into benefit-risk assessment methods (including pharmacoeconomics), the process of decision making on medicines by different stakeholders
- To be able to apply benefit-risk assessment methods in daily practice

#### Academic course offer in Domain 5

Offered as

1. Introduction to benefit-risk assessment and pharmacoeconomics in decision making

- Introduction

- Benefits

- Risk/Harms

- Principles and methods of comparative benefit-risk assessment
- Principles of Pharmacoeconomics

C Certificate

#### 2. Principles of pharmacoeconomics and valuation of health states

- Introduction

- Costs

- Effects

- Pharmacoeconomic analysis

- How to perform a good pharmacoeconomic evaluation

#### Offered as

C Certificate

or

Master (Y2) module or

D PhD module

#### 3. Fundamentals of quantitative benefit-risk assessment methods in decision making on medicines

- Introduction to benefit-risk analysis methods

- Benefit/Risk assessment during life cycle of medicines

- Measures based on statistics/simulation

- Health outcomes models

C Certificate

M Master (Y2) module

D PhD module

#### 4. Advanced quantitative benefit-risk assessment methods in decision making on medicines

- Multi-criteria decision analysis

- Conjoint analysis

- Personalised benefit-risk assessment

C Certificate

M Master (Y2) module

or

D PhD module



# Medicines and public health

Directed by the Autonomous University of Barcelona

#### Course objectives

#### Introductory level module

- To provide basic knowledge of the evaluation of the effects of medicines from an epidemiological point of view
- To understand the limits of the available information on efficacy and risks associated with medicines
- To understand the differences between experimental studies and the actual use of medicines in clinical settings
- To know how is it possible to study the effects of medicines from a public health point of view

#### Intermediate level modules

- To provide intermediate and advanced knowledge of the effects of medicines from a public health point of view
- To develop theoretical and practical knowledge of the quantitative analysis of medicines utilisation
- To develop theoretical and practical knowledge of the qualitative analysis of medicines utilisation

#### Advanced level module

To know how to study the health and economical impact of side effects of medicines for the community

Offered as

#### 1. Basics in pharmacoepidemiology

- Patients, medicines and prescribing in society. Life cycle of medicines

- The knowledge-building process of the effects and adverse effects of medicines during their development and clinical use

- Overview of studies to detect and to evaluate the risk associated with therapeutic interventions Scope, uses and limitations
- The need to monitor the medicines prescribing process
- Introduction to the study of the use of medicines in clinical practice

C Certificate

M Master (Y1) module

#### 2. Drug utilisation studies: introduction and quantitative methods

- Measurement of drug use

- Overview of drug utilisation studies DUS

- Quantitative measures of drug utilisation

- Design of quantitative DUS

- How to read papers on quantitative DUS

C Certificate

Master (Y2) module

or

D PhD module

#### 3. Drug utilisation studies: qualitative methods

- Sources of data and standards to compare with
- Methods to identify how medicines are used in the community (1) - prescription vs indication and indication vs prescription

- Methods to identify how medicines are used in the community (2) - cohort and case-controls studies as a source of drug utilisation data

- Design of qualitative DUS: Objectives, methods and discussion of proposals

- How to read papers on qualitative DUS Limitations of DUS

C Certificate

or

M Master (Y2) module

or

D PhD module

Introductory level
 Intermediate level

Offered as

#### 4. The public health impact of adverse drug reactions

 Data generalisation: from particular cases to population impact-1, the interpretation of the results of clinical trials and meta-analyses from the public health point of view

 Data generalisation: from particular cases to population impact-2, examples of the value of observational studies and meta-analyses of observational studies in the evaluation of the public health impact of medicines use

- Public health impact Case: Hormone replacement therapy
- Public health impact beyond case-control studies
- The importance of the denominator: Case-population studies, the future of pharmacovigilance

**C** Certificate

or

M Master (72) module

or

PhD module

Advanced level



# Eu2P Domain 7 Medicines risk communication

Directed by the University of Bordeaux and the University Luigi Vanvitelli of Naples

#### Course objectives

#### Introductory level modules

To know the basic principles of medicines risk communication, its tools and its place in mitigating risks linked to the use of medicines

#### Intermediate and advanced level modules

- To get a clear understanding of the stakes and stakeholders' involvement in medicines risk communication and their determinants
- To have an accurate view of the way medicines risk communication works in the real life

#### Academic course offer in Domain 7

Offered as

#### 1. Basics in communication

- Which knowledge and skills are useful for communication?
- Concrete examples of communication: what do we retain?

**DPICS** 

- Why communicate?

  Nature and importance of communication

  Personal and social dimension of communication
- Face to face between doctor and patient How to find the right word?

**C** Certificate

or

Master (Y1) module

Offered as

#### 2. Information and communication about benefit-risk of medicines. Basic principles.

- Principal actors in communication on medicines risk, of traditional and new forms of communication, of routes of communication and their evolution through time

- Basis of risk communication process

- Regulatory responsibilities and requirements concerning medicines risk communication

- Communication of actual and alleged risks associated to medicines: three different scenarios

#### C Certificate

or

Master (Y2) module

D PhD module

#### 3. Key roles and stakeholders in medicines risk communication: duties and challenges

- Historical perspective : evolution of concept of risk communication, social impact of drug risk communication

- Risk perception: actual vs perceived and factors influencing perception, population vs individual risk perception

- Concept of uncertainty: how to deal with this in risk communication

- Nature and importance of communication of risk of medicines: accessibility of data, conflict of interest and independent information

- Regulatory agencies' strategies to address the challenges of risk communication

C Certificate

M Master (Y2) module

D PhD module

#### 4. Case studies in medicines risk communication

- Hepatitis B vaccine in France, pandemic influenza vaccines. HRT and cancer: what can we learn? What could have been done?

- Communication aspects based on drug withdrawals: e.g. rofecoxib, rosiglitazone, benfluorex, what can we learn? What could have been done?

- How to measure the effectiveness of risk communication?

**C** Certificate

M Master (Y2) module

PhD module

Introductory level
 Intermediate level
 Advanced level

# THE Eu2P SHORT COURSES PROGRAMME ORGANISATION

### Gain rapid and accurate expertise through the Eu2P Short courses!



#### 1 year full-access



## The Eu2P short courses programme organisation

#### Get a Certificate of Training Achievement

The Eu2P short course is a training designed for professionals who want to get an up-to-date, quick and solid knowledge. This programme leads to Awards in pharmacovigilance and pharmacoepidemiology jointly acknowledged by the European Universities working together as Eu2P partners.

#### Get a valuable Certificate for job market

#### A recognised quality for audit inspections

Eu2P programme ensures and controls up-to-date knowledge, expertise and qualification of medicines-related collaborators, from individuals to large teams.

#### Designed for experts by experts

The Eu2P Short Courses have been built by the academic, regulatory and industrial Eu2P partners. The short courses are grounded in real job market and today's practices.

Eu2P programme is being noticed and recognised worldwide as an excellent means to get medicines-related jobs.

#### Choose a flexible online programme

Awarded for e-learning quality, Eu2P online courses can be attended from home or work. The course workload runs from 30 minutes to 6 hours. The learning activities can be followed according to your wish. You can start a learning activity then stop and start another one, then come back later to the one you have firstly opened.

The Certificate is awarded after a final assessment.

#### Enjoy affordable prices

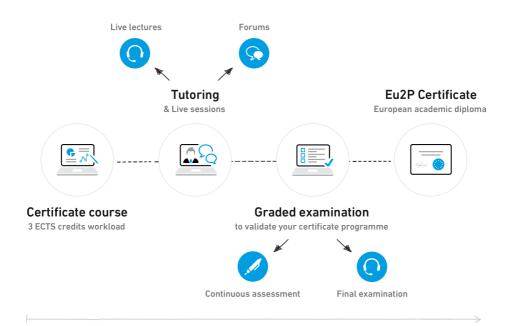


Eu2P supports worldwide pharmaceutical companies for their in-house training plans and provides quotes tailored to their needs in terms of content, duration and number of collaborators.

Find detailed informations on this offer in the Eu2P short courses leaflet

# THE Eu2P CERTIFICATE PROGRAMME ORGANISATION

### Improve your professional competencies through the Eu2P academic Certificate diploma!



#### 3 months



# The Eu2P Certificate programme organisation

#### Get a European academic Certificate

The Eu2P Certificate leads to academic Awards in pharmacovigilance and pharmacoepidemiology jointly delivered by the European Universities working together as Eu2P partners.

Standard and extended Eu2P certificates learning achievements are **recognised as** respectively 3 and 6 ECTS credits.

#### Get a valuable Certificate for job market

#### Graded expertise level

You can choose between introductive, intermediate or advanced Certificate courses level fitting your background and needs!

#### A recognised quality for audit inspections

Eu2P programme ensures and controls up-to-date knowledge, expertise and qualification of medicines-related collaborators, from individuals to large teams.

#### Designed for experts by experts

The Eu2P Certificates have been built by the academic, regulatory and industrial Eu2P partners. These certificates are grounded in real job market and today's practices.

Eu2P programme is being noticed and recognised worldwide as an excellent means to get medicines-related jobs.

#### Choose a flexible online programme

Awarded for e-learning quality, Eu2P online courses are followed at home and on job premises at your convenience. The average course workload is one day a week over a 3 or 6 months period (depending on the course ECTS credits).

The Certificate diploma is awarded after a final assessment session.

#### Enjoy affordable prices

Tuition fees are adjusted to student or professional status.

Savings on regular fees can be offered under eligibility conditions.

Students	Professionals	Companies
1,500€	3,000 €	Quote on request

#### Get savings

#### Partners' saving

Each **Eu2P partner benefits from a special price** on Eu2P tuition fees for their students or employees!

Savings for Certificate fees		
Student in a Eu2P University - 50%		
Employee in a Eu2P agency, company or affiliate	- 30%	

#### Reward programme

Gain up-to 20% of savings when studying with Eu2P!

Eu2P gives you reward points each time you register to a Eu2P Certificate: one point amounts to one euro. You can redeem these points and get savings on next course tuition fees!

#### Apply on-line

#### Calendar

**On-line application sessions** are organised throughout the year according to the Certificates calendar:

Check upcoming Certificates on www.eu2p.org

- A first Certificate session runs from October to December
- A second Certificate session runs from January to April
- A third Certificate session runs from April to June

#### Admission criteria

The application procedure and the selection process are the same for all candidates, regardless of whether you come from Eu2P partners or not, from European or third countries.

More info about application P55

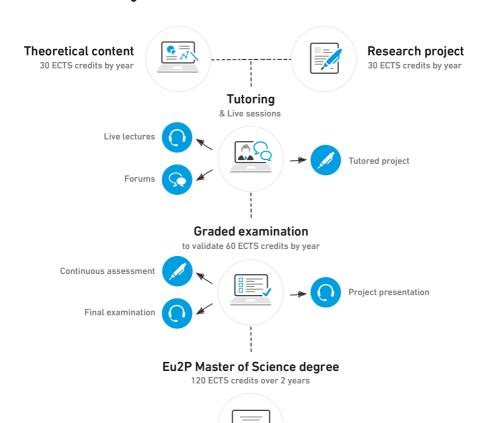
To be eligible, you must:

- **be fluent in English**
- **be** familiar with computer use and have Internet access
- submit a complete on-line application, together with all supporting documentation required (diplomas, certificates, letter of motivation...)

**Pre-requisites depend on the chosen module**: please refer to each Certificate description page on <a href="https://www.eu2p.org">www.eu2p.org</a>.

## THE Eu2P MASTER PROGRAMME ORGANISATION

### Strengthen your profile through the Eu2P Master of Science!





### The Eu2P Master programme organisation

#### Get a European Master of Science degree

#### 120 ECTS credits over 2 years

The Eu2P Master is an academic post-graduate training in pharmacovigilance and pharmacoepidemiology that leads to a MSc degree jointly awarded by the European Universities working together as Eu2P partners.

The Eu2P Master includes for each academic year:

- 30 ECTS credits through the validation of theoretical content
- 30 ECTS credits through the validation of a research project

Each Master trainee must conduct a **research project in parallel to the theoretical training** along the academic year. This research project can be achieved within an academic, regulatory or private body.

#### Your curriculum specialisation

In second year, choose a Master specialisation among:

- Benefit assessment of medicines
- Medicines risk identification and quantification
- Medicines benefit-risk assessment
- Medicines and public health
- Medicines risk communication

or select "à la carte" modules to match specific needs

#### Get a valuable Master degree for job market

The Eu2P Master degree curriculum has been built by the academic, regulatory and industrial Eu2P partners. Eu2P courses are grounded in real job market and today's practices. The Master research projects can be performed in public or private environments.

Eu2P programme is being noticed and recognised worldwide as an excellent means to get medicines-related jobs.

#### Choose a flexible online programme

Awarded for e-learning quality, Eu2P online courses are followed at home and on job premises at your convenience.

Master Year 1 or 2 curriculum can be performed **on a full or part-time** basis to suit your time availability.

The Master can be entered directly into the 2<sup>nd</sup> year for postgraduate trainees.

#### Get savings and grants

#### Master annual tuition fees

<b>Students</b>	Professionals
7,000 € per year	12,000 € per year

#### Partners' saving

Each **Eu2P partner benefits from a special price** on Eu2P tuition fees for their employees!

Savings for Master year fees	
Employee in a Eu2P agency, company or affiliate	- 20%

#### Reward programme

Gain up-to 20% of savings when studying with Eu2P!

Eu2P gives you reward points each time you register to a Eu2P Master programme: one point amounts to one euro. You can redeem these points and get savings on next course tuition fees!

#### Master grants

Eu2P offers a limited number of grants to Master selected applicants to cover partial Master tuition fees.

Eu2P grants are awarded by the Eu2P consortium and private organisations on the appraisal of the applicant's status regarding:

- Academic performance
- ( ) Professional ambition and environment
- Personal situation
- Any special and financial circumstances that may affect training performance

#### Apply on-line

#### Calendar

The first and second Master years run from the end of September to early July for theoretical training and research project.

On-line application runs each year from January to June through www.eu2p.org

#### Admission criteria

The application procedure and the selection process are the same for all candidates, regardless of whether you come from Eu2P partners or not, from European or third countries.

More info about application P55

To be eligible, you must:

- **>** be fluent in English
- (2) be familiar with computer use and have Internet access
- submit a complete on-line application, together with all supporting documentation required (diplomas, certificates, letter of motivation...)

#### If you apply to the full Master (entry in Year 1), you must:

have at least a Bachelor degree or an equivalent certified level in Health or Life sciences

#### If you apply to Master Year 2, you must:

- hold a Master Year 1 level or an equivalent certified level in Health or Life sciences including credits in basic pharmacology, epidemiology and statistics
- or
- be employed, have a graduate level in Health or Life sciences and 3 years of relevant professional experience in Pharmacovigilance and Pharmacoepidemiology

#### Master Year 1 curriculum

The Master Year 1 trainee must validate the theoretical and the practical trainings to progress to the second year programme of the Master in Pharmacovigilance and Pharmacoepidemiology.

#### Theoretical courses (30 ECTS credits)

Basics in	Basics in	Valorisation and critical	Basics in clinical
epidemiology	statistics	appraisal in research	pharmacology
Principles of pharmacovigilance	Basics in pharmaco- epidemiology	Basics in medicines risk communication	Analysis and synthesis of health data

Each course module is appraised through **continuous and/or final assessment**. The Master Year 1 trainee must at least **obtain the "pass" grade in each module to validate the theoretical training part** of the Master first year programme.

#### Project research (30 ECTS credits)

Each Master trainee must conduct a **research project in parallel to the theoretical training along the academic year**. This research project can be achieved within an academic, regulatory or private body.

This research project is assessed through three separate assessments:

- (2) the overall research project conduct
- the research project written report
- the oral defence of the research project report

The Master Year 1 trainee must at least obtain the overall "pass" grade for the research project to validate the practical training part of the Master first year programme.

#### Master Year 2 curriculum

The Master Year 2 trainee must successfully complete the theoretical and the practical trainings to be awarded the Eu2P Master in Pharmacovigilance and Pharmacoepidemiology.

#### Theoretical courses (30 ECTS credits)

TRACK D2		TRACK D4	TRACK D5	TRACK D6	TRACK D7
Clinical pharmaco- logical principles	Pharmaco- vigilance regulations	Principle of identifying and recognising adverse events and safety signals	Introduction to benefit-risk assessment and pharmaco- economics in decision making	Drug utlisation studies : introduction and quantitative methods	Information and communication about benefit-risk of medicines. Basics principles
Methods in clinical research, PE and in the assessment of efficacy of medicines	Pharmaco- vigilance regulations processes	Substantiation and quantification of risks (1)	Principles of pharmaco- economics and valuation of health states	Drug utilisation studies : qualitative methods	Key roles and stakeholders in medicine risk communication duties and challenges
Critical appraisal of clinical trials: evidence- based medicine and its uncertainties		Substantiation and quantification of risks (2)	Fundamentals of quantitative benefit-risk assessment methods in decision making on medicines	The public health impact of adverse drug reactions	Case studies in medicines risk communication
		Identifying susceptibility for adverse drug reactions	Advanced quantitative benefit-risk assessment methods in decision making on medicines		

Each course module is appraised through **continuous and/or final assessment**. The master Year 2 trainee must at least **obtain the "pass" grade in each module**, whether their course modules are mandatory or complementary.

For this second year of Master, **two teaching scenarios are proposed to trainees:** "Specialised Master" vs "A la carte Master".

#### **Specialised Master**

The whole black modules row is mandatory

One specialisation track column is chosen among:

TRACK D2 = "Domain 2 - Benefit assessment of medicines"

TRACK D4 = "Domain 4 - Medicines risk identification and quantification"

TRACK D5 = "Domain 5 - Medicines benefit-risk assessment"

TRACK D6 = "Domain 6 - Medicines and public health"

TRACK D7 = "Domain 7 - Medicines risk communication"

Complementary modules have to be selected among remaining modules to overall validate 30 ECTS credits

#### "A la carte" Master

This track is composed of **four modules of your choice** among the Master specialisations (blue modules)

The whole black modules row is mandatory

Complementary modules have to be selected among remaining modules to overall validate 30 ECTS credits

#### Project research (30 ECTS credits)

Each Master trainee must conduct a **research project in parallel to the theoretical training along the academic year**. This research project can be achieved within an academic, regulatory or private body.

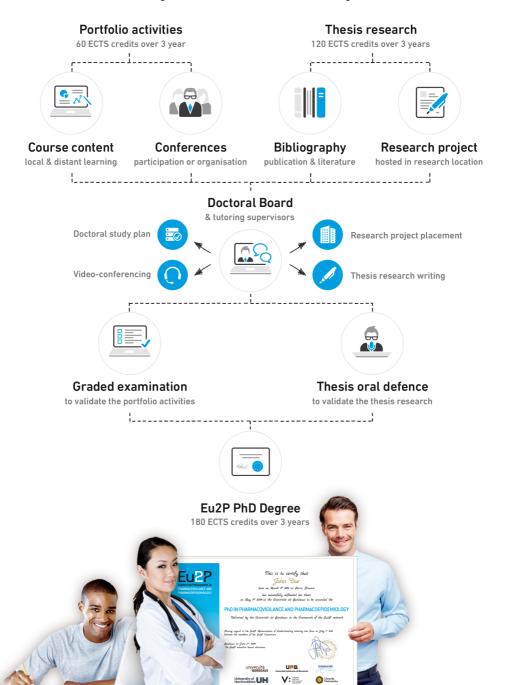
This research project is assessed through three separate assessments:

- the research project supervisor evaluation
- the research project written report
- the oral defence of the research project report

The Master Year 2 trainee must at least obtain the overall "pass" grade for the research project to validate the practical training part of the Master second year programme.

## THE Eu2P PhD PROGRAMME ORGANISATION

### Deepen your knowledge through the Eu2P PhD degree!



## The Eu2P PhD programme organisation

#### Get a valuable academic PhD degree

#### 180 ECTS credits over 3 years

The Eu2P PhD programme is an academic doctorate curriculum in pharmacovigilance and pharmacoepidemiology. It leads to a PhD degree awarded by one of the Eu2P Academic Partners under the authority of the relevant National Ministry of Higher Education or ad hoc authority.

The whole Eu2P PhD curriculum covers **3 consecutive years**, for a **total of 180 ECTS credits**, including:

- 120 credits gained progressively by researching and writing a thesis
- 60 credits for secondary PhD portfolio activities carried out at any given moment during the research period.

Yearly overview of the PhD curriculum				
Type of activity		ECTS credits (number/year)	Total of ECTS (credits/year)	
Thesis research	Bibliographic knowledge	10	40	
	Advanced research training	30		
Portfolio activities	Eu2P workshop	4		
	Eu2P local and distant learning	6	20	
	Seminars & workshops participation	10		

#### Your curriculum specialisation

PhD students are **driven by a supervising team** related to one of the Eu2P Academic partners for their thesis, but also to carry out their advanced project research, portfolio activities or simply to meet them and benefit from their knowledge. All these activities are detailed in their **personal Doctoral Study Plan**.

#### Get a valuable post-graduate degree for job market

**Eu2P courses are grounded in real job market and today's practices** and research projects can be performed in public or private environments.

Eu2P programme is being noticed and recognised world-wide as an excellent means to get medicines-related jobs and improve regulatory sciences.

#### Choose an on-the-job PhD programme

The Eu2P PhD is open to applicants who hold a post-graduate diploma in Pharmacovigilance and Pharmacoepidemiology (e.g. Master of Science), from both EU and non-EU countries, without limitation in terms of age and nationality. Applicants may belong to Universities who are not part of the Eu2P PhD network.

PhD curriculum should be completed on a **full-time basis for 3 consecutive years** with a sufficient funding.

It can be carried out in parallel to a professional occupation.

Trainees must ensure that they shall be able to complete their research work and defend their PhD thesis within an absolute maximum of 3 years beginning with the date of initial registration in the doctoral programme.

#### Get savings and grants

#### PhD annual tuition fees

Students	Professionals
4,500 € per year	6,000 € per year

#### Partners' saving

Each **Eu2P partner benefits from a special price** on Eu2P tuition fees for their employees!

Savings for PhD year fees	
Employee in a Eu2P agency, company or affiliate	- 20%

#### PhD grants

Eu2P offers a limited number of grants to PhD selected applicants to cover partial PhD tuition fees.

Eu2P grants are awarded by the Eu2P consortium and private organisations on the appraisal of the applicant's status regarding:

- Academic performance
- ( ) Professional ambition and environment
- Personal situation
- Any special and financial circumstances that may affect training performance

#### Apply on-line

On-line application runs each year through <a href="https://www.eu2p.org">www.eu2p.org</a>

More info about application P55

#### Admission criteria

The Eu2P PhD is open to applicants from both EU and non-EU countries, without limitation in terms of age and nationality.

Applicants may also belong to Universities who are not part of the Eu2P PhD network

To be eligible, you must:

- satisfy the entrance requirements for admission to the doctoral programme (3<sup>rd</sup> cycle within the European Higher Education and Research Area)
- have solid background in Pharmacovigilance and Pharmacoepidemiology documented on the basis of your transcripts and your Master of Science degree in Pharmacovigilance and Pharmacoepidemiology

#### Doctoral study plan

The definition of the PhD topic is carried out in the Doctoral Study Plan in several stages by updating the research project for which the student has been selected and subject to remarks and suggestions along the whole duration of the thesis. The Doctoral Study Plan is consequently subject to supervision and validation by the Eu2P degree-awarding institution through the Eu2P Doctoral Board members and the approval of their related local doctoral school.

#### Supervision of the doctoral study plan

The Eu2P Doctoral Board sets the standards that the doctoral student must achieve and approves for each student, an academic plan and a project programme involving mobility called "Doctoral Study Plan".

For this purpose, the Doctoral Board appoints during the first induction month a PhD supervisor in line with the student Research project synopsis. The PhD supervisor must belong to a Eu2P Academic Partner and hold an accreditation or an equivalent level to supervise doctoral thesis such as full professor.

In the first three months of the programme, the PhD supervisor oversees the student's progress, strengths or weaknesses, and guides him/her to the preparation of the **Doctoral Study Plan** that is **submitted to the Doctoral Board at the end of the first trimester**.

The PhD supervisor in particular helps the student in the adoption of the most appropriate methodology to carry out his/her research successfully and guides him/her in the necessary research and drafting of a final thesis. There must be at least two meetings a year gathering the PhD student and the supervisor. Video-conferencing facilities may be used for meetings. The doctoral student may also benefit from other forms of peer monitoring in hosting academic and research centres.

#### Setting up and annual validation of the doctoral study plan

A Doctoral Study Plan must be established for each selected Eu2P PhD Student.

Eu2P members explicitly invite innovative project proposals which are prepared to strike out into new fields. Within the programme, public and private Eu2P members can provide expert supervision and academic accompaniment in a wide variety of fields and their interconnections.

The Doctoral Study Plan drawn up during the first term of the PhD curriculum between the PhD student and his/her supervisor, must detail:

- The thesis research project supervision such as appointment rules, names and roles of the supervisor
- The thesis research project conduct locations, the description and scientific justification of the mobility within the Hosting academic and research centres
- The research activities main lines and expected results
- The programmed portfolio activities

The final validation of the initial Doctoral Study Plan is the last mandatory step needed before the student can actually finalise his/her registration with the awarding Eu2P Academic Partner.

The Doctoral Study Plan must be yearly updated and validated together with the PhD student and supervisor. Each annual update must be sent to the Eu2P Central Office to be recorded and available for consultation by the Doctoral Board and each related doctoral school of Eu2P Academic Partners.

#### Doctoral study location and mobility

The Eu2P PhD student is advised to make the most of the Eu2P consortium possibilities and build a close research network among the Eu2P partners. Each PhD student is based primarily at one Eu2P Home academic institution depending on his/her PhD supervisor.

The student is strongly encouraged to work at least 6 months of the programme at another public or private Hosting Institution.

The Eu2P PhD student has the opportunity to **perform the thesis research project** in the premises of:

- A Eu2P Academic Partner
- An Higher Education Institution which it is not a Eu2P partner

or

○ A non-Higher Education Institution, which may or may not be a Eu2P partner
 In all cases, the Eu2P PhD student must be supervised by the PhD supervisor
 appointed by the Doctoral Board, belonging to a Eu2 Academic Partner, and be a
 full or associate professor.

When the student is conducting research in another location than the supervisor institution, a local tutor is appointed by the supervisor. In any case, the tutor must be a full or associate professor or equivalent with full authority to graduate PhD i.e. must have an academic accreditation to supervise research.

Mobility to a public or private institution must be justified in the Doctoral Study Plan.

For PhD students currently pursuing in parallel their work at one of the Eu2P Associated Partner's premises, the mobility requirement may be adapted in the Doctoral Study Plan, upon specific agreement granted by the Eu2P Doctoral Board.

#### PhD portfolio activities

#### **Doctoral Activities**

In order to enhance the students' employability and to improve their written/oral communication skills, the Doctoral Board has added portfolio activities so that the future Ph. Doctors are also fully operational as global academics. The academic plan of doctoral students comprises the carrying out of portfolio activities.

All the activities below are **strongly recommended** to the Eu2P doctoral students, but only **60 ECTS credits** worth of activities are validated for their degree; this can be done at any stage during the whole duration of the Doctorate.

Doctoral Activities	ECTS credits (number)
Producing an article for publication in a recognised journal	10
Producing a review for publication in a recognised journal	10
Participating or organising a conference, symposium	3
Teaching experience at higher-education level	3
Completing Eu2P training courses and summer school	From 3 to 6

#### Completion of Eu2P training courses

The PhD student must justify the follow up and completion of the theoretical training along their project research work for at least a total amount of **20 ECTS** credits along the three years of PhD registration.

Students may either follow modules chosen from the Eu2P web-based training offer among the seven domains or follow local face-to-face Eu2P Academic partner courses during the annual Summer schools.

# THE Eu2P PROCESS TO APPLY FOR A TRAINING PROGRAMME

## The Eu2P process to apply for a training programme

#### **Application**

#### The on-line process

Eu2P registration tool enables you to apply on-line to any Eu2P training.

The Eu2P application process must be fully completed on-line.

You are asked to upload all the needed documents within this on-line application.

To apply for Eu2P programme, you have to:



Choose one training programme to apply for



Login to your "My Eu2P" account, or create one if needed



Provide required application data



Pay for application fees: 25 €

#### The paper process

The Eu2P application process must be fully completed on-line.

Nevertheless, if you can not upload needed documents, please print your on-line application fully completed and send it by postal mail with the copy of all needed documents to the following address:

#### **Eu2P Central Office**

Université de Bordeaux 146 rue Léo Saignat - Case 36 33076 Bordeaux cedex FRANCE

#### Selection

Once your on-line application file is complete, it is sent to the respective pedagogical Board.

The Board ranks Eu2P applicants for each of the training:

- (2) Eligible list: you are eligible for immediate registration.
- Waiting list: you could be eligible, provided that some "Eligible list" applications are cancelled.
- Non-eligible list: your application data are not approved for registration.



You will be warned about your application status by the Eu2P Central Office by e-mail.

#### Registration

Once you are informed about your selection status by e-mail, **you are invited to confirm your registration** as follows.

- You are eligible: you need to confirm your registration before a deadline and to pay for tuition fees to validate your registration
- You are on waiting list: you need to confirm your position on the waiting list

If you are non-eligible, you can contact the Eu2P Central Office for further explanations.

### JOIN AND FOLLOW US TO STAY INFORMED

#### **ON Eu2P WEBSITE**



#### ON Eu2P SOCIAL NETWORK

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