

# PHAR-QA

by PHARMINE

*Quality Assurance in European Pharmacy Education and Training.*



**The Newsletter**

*October 2014*



Lifelong  
Learning  
Programme

PHAR-QA Quality Assurance in European Pharmacy Education and Training.



# The PHAR-QA newsletter

October, 2014.

<http://www.phar-qa.eu/>

## *Quality Assurance in European Pharmacy Education and Training: the PHAR-QA project*

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## Partner 6.

### Faculty of Pharmacy, University of Helsinki, Finland.

The University of Helsinki was established in 1640 and pharmacy education started here in the late 19<sup>th</sup> century, some 125 years ago. Today the University of Helsinki is amongst the leading European research Universities and Faculty of Pharmacy is one of eleven University of Helsinki Faculties. We are located in the Viikki Campus of Biosciences some eight kilometres from the city centre. As an international top level research University, the University of Helsinki tackles the multidisciplinary global challenges like health and climate change in the spirit of *“For the Best of the World and the Society”*.



University of Helsinki  
Main building



Faculty of Pharmacy  
Viikki Campus

The strategy of the Faculty of Pharmacy is based on the premise that Pharmacy is a multi-disciplinary field of science that specialises in medicinal treatments and studies drugs, medicines and their development, use and effects from the point of view of natural sciences, health sciences, as well as social sciences and economy. The task of the Faculty is to promote pharmaceutical research and provide the highest-level education in the field in Finland. Pharmaceutical experts and expertise are integral parts of the national health care system.



Jouni Hirvonen  
Dean, Professor



Nina Katajavuori  
Pedagogic University Lecturer

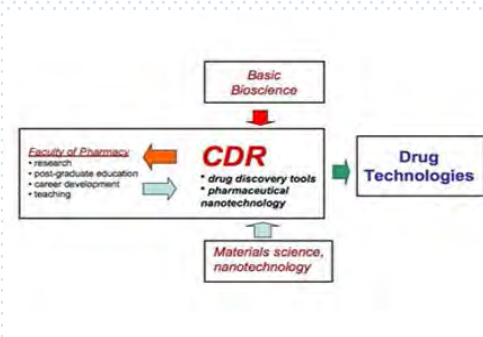
Today, the Faculty of Pharmacy personnel consists of about 220 persons and the students number around 950 including more than 100 graduate students. The number of degrees per year are on average: B.Sc. 150, M.Sc. 54 and Ph.D. 12 graduates. The annual budget in 2014 is some 16.5M€ (basic = University funding 8.5M€, external = competitive grant and industrial funding 8M€).

The Faculty has three integrated Divisions: Pharmaceutical Biosciences, Pharmaceutical Chemistry and Technology, and Pharmacology and Pharmacotherapy. Our units and research groups are highly multi-disciplinarily with strong emphasis on international and national collaboration.

The Faculty has been nominated as a National Centre of Excellence in University Education, while true commitment to top-level scientific research and implementation and active societal input and collaboration are also pivotal to our success.

### Research activities in the Faculty of Pharmacy, University of Helsinki.

- - Pre-clinical medicine  
research & method development
- - Drug and medication safety
- - Pharmaceutical nanotechnology
- - Medicinal treatment and drugs  
for children and elderly
- - Effectivity and cost-effectiveness of drugs



Key research areas in the Faculty

Centre for Drug Research

Carefully selected key research areas in the Faculty are summarized above together with the organisation of the “Centre for Drug Research” in the Faculty. A new organization with fewer divisions and higher critical mass of researchers was launched in the beginning of January, 2014. Strongly increased external funding share has been based on high success rate in competitive funding calls and active recruitment of first-class junior and senior researchers. We truly emphasize the development and responsibility of young enthusiastic and talented researchers.

In addition to the key research areas listed above, we are committed to the University level goals like global challenges in biomedical research including personalized medicine. By first-class science we target high impact publications – as of today, a higher number of publications per researcher needs to be achieved.

### Pharmacy education development in the Faculty of Pharmacy.

The Faculty of Pharmacy has a long tradition in the development of teaching, and the Faculty has been rewarded many times for its good teaching practices. For example in 2010-2012 the Faculty was nominated as a “Centre of Excellence” in Finnish University education. Evaluation of the faculty demonstrates a strong commitment towards teaching and a focus on the pedagogical development of its staff.



The curriculum has been systematically developed over a very long period of time and implemented through a process involving both students and external stakeholders. A shared operating model and extensive student involvement in development work, including feedback systems, are and have been the cornerstones of development work and the management of education.



In 2005 curriculum reform was conducted as a part of the Bologna process. During that time both the bachelor and master degrees were developed further and a strand-based model for the curriculum was developed. Research on learning and teaching practices has also been conducted actively in the Faculty and the developed practices for teaching and curriculum have been based on these research findings.

Experience of the strand-model and its challenges, the research findings about teaching and learning pharmacy, and the need to define learning outcomes for bachelor and master degrees led to a new curriculum reform during 2012-2014. Based on the previous data, research findings and interviews, the aims for the new curriculum reform were elaborated. They were: (1) to create learning outcomes for the Bachelor’s and Master’s degree in pharmacy which meet the needs of working life, (2) to create a more challenging curriculum and to develop teaching and assessing methods which foster students’ deep level learning and demand active work by students, and (3) to increase the flexibility of the curriculum and the amount of optional studies and, thereby, strengthen the professional identity of the students.

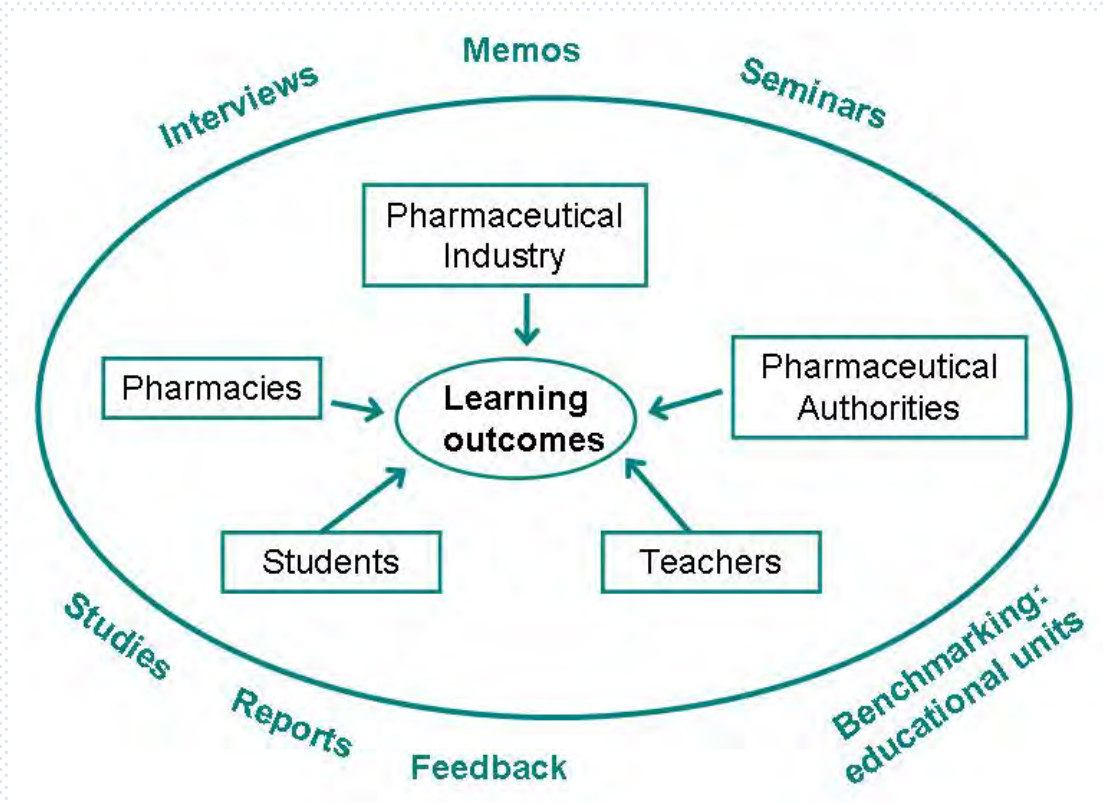
The starting point for the curriculum renovation and planning the teaching was to define the learning outcomes of the bachelor and master degrees.

**Summary of the learning outcomes for the bachelor and master degree.**

<b>Theoretical skills</b>	<b>Generic skills</b>
Is able to apply knowledge in sciences and drug therapy to daily work	Has developed his/her professional identity
Understands the significance and role of pharmacy in society	Is able to think critically, to assess the information and its relevance
Understands the basic principles of economics	Is able to solve problems and work under a hard pressure
Masters the communication skills	Understands the significance and is motivated for life-long learning
	Is able to work in a multi-professional team

The needs of the working life were found out by interviewing several representatives of communal and hospital pharmacies, pharmaceutical industry and authorities in pharmacy sector. Furthermore, focus group discussions were conducted also with pharmacy students and faculty teachers in each discipline as well as with the international staff of the Faculty.

For the first time, the learning outcomes for the degrees in pharmacy included also generic skills (Table below). The importance of the generic skills in working life was highly emphasized in the discussions.



**Defining the learning outcomes for the bachelor and master degrees.**

During the interviews rose up also other aspects which should be taken into account in the curriculum reform process. New learning outcomes as well as the information which rose up from the interviews led to the renovation of the strand structure within the curriculum to foster the constructive alignment and the redesigning of the study courses. Coordinators for the four strands in the curriculum, the strand leaders, were nominated, and the teachers were challenged to define the learning outcomes for the strands and individual study courses in more detail in order to further develop the constructive alignment in the curriculum.

In order to challenge the students thinking and deep learning, new teaching and assessing methods including, for example, flipped classrooms, project works and courses, and self and peer assessments, were introduced to the curriculum. To increase the professional identity of pharmacy students, the amount of optional studies was increased in the new curriculum. In addition, the optional studies were grouped in three study paths, namely (1) community and hospital pharmacy, (2) industrial pharmacy and pharmaceutical authorities, and (3) research and



scientific thinking. Furthermore, learning of generic and metacognitive skills is now integrated in the theoretical studies in order to achieve the learning outcomes of the degrees. For this purpose, peer-groups for students were established. These groups study together during the whole degree - generic skills and theoretical topics at the same time.

Students' own learning processes are now supported systematically throughout the studies by challenging them to assess their own learning more systematically during the whole degree in a learning portfolio. Students' theoretical knowledge will be assessed by progress-examination in the end of each study-year. This examination will give information about students' level of knowledge during the studies both for the students themselves and for the Faculty teachers, and thus, it will serve as a quality control of students' learning. In the end of their bachelor's studies the students will also participate in an OSCE-examination, which will cover the different aspects of multidisciplinary pharmacy subjects.

Active follow up and participation in the PHARMINE and PHAR-QA EU-projects has given as enormous opportunities on learning and sharing information in a Europe-wide network towards the development of pharmacy education and pharmacy profession towards the challenges of the next decades.

## The PHAR-QA survey on competences for pharmacists in Europe.

The PHAR-QA (*Quality assurance in European pharmacy education and training*; <http://pharqa.madocke.be/>) project, funded by the EU, focusses on competences and quality assurance (QA) in the education and training of European pharmacists. It is an extension of the study initiated by PHARMINE (*Pharmacy Education in Europe*; <http://pharmine.madocke.be/>).

The PHAR-QA consortium is producing a framework of competences for pharmacy practice. This PHAR-QA competence framework is in line with the EU directive on the sectoral profession of pharmacy. It also takes into account the diversity of the pharmacy profession and the on-going changes in European healthcare systems and in the pharmaceutical industry - with an increasingly important role for pharmacists. The bottom line is patient safety. This is the primordial preoccupation of the pharmacist - be it in everyday practice in community or hospital pharmacies, or in industry ensuring the research, development and production of efficient and safe medicines. The ultimate stakeholder of the PHAR-QA project is the European citizen.

PHAR-QA involves a consortium of universities at the forefront of educational research and development in pharmacy. The project is co-ordinated by the Vrije Universiteit Brussel and Pharmacolor Consultants, Nancy, France with the participation of the University of Granada, Spain, the National and Kapodistrian University of Athens, Greece, the University of Tartu, Estonia, the University of Helsinki, Finland, the University of Ljubljana, Slovenia, the Jagiellonian University of Cracow, Poland, and the Medical and Pharmaceutical University Carol Davila of Bucharest, Romania. PHAR-QA works in close collaboration with the European Association of Faculties of Pharmacy (<http://eafponline.eu/>) and other European organisations. It has an international advisory board with experts in QA in pharmacy education from the USA, UK, and Spain.

PHAR-QA is running a survey on the evaluation by the European pharmacy community of a framework of competences for pharmacy practice. The project outcomes will be used by pharmacy faculties in Europe, education and healthcare sectors of national governments, EU directorate-generals and professional organizations and chambers. Information will also be provided to non-European countries wishing to implement the European model developed by PHAR-QA.

PHAR-QA is asking academia, students and practising pharmacists to rank the importance of the competences for pharmacy practice. We would like to ask you to fill in the survey at: <https://www.surveymonkey.com/s/pharqasurvey1>. We also ask you to please send this message, with the web address, to university staff members, students, community, hospital and industrial pharmacists, and pharmacists working in other areas (clinical biology and government offices) in your country. Please note that all replies are individual and anonymous. We are not asking for the position of associations, chambers or whatever. We know that your time is precious but the 20 minutes spent filling in the survey are vital to the development of the pharmacy profession.





**EAFP** EUROPEAN ASSOCIATION OF FACULTIES OF PHARMACY



HELLENIC REPUBLIC  
National and Kapodistrian  
University of Athens

Faculty of Pharmacy

# 21<sup>st</sup> EAFP Annual Conference

14-16/05/2015

University of Athens  
Greece



Quality Assurance  
in Pharmacy Education

*Acropolis museum*

<http://eafponline.eu/conferences/athens2015/>

## DATES TO REMEMBER

Call for Abstracts

**September 15–December 15, 2014**

Notification of Abstract Acceptance

**February 15, 2015**

Deadline for Early-bird Registration

**March 15, 2015**

## ORGANISATION

### Conference Organising Committee

#### DAISY VOLMER

(Department of Pharmacy, University of Tartu;  
Estonian Academic Society of Pharmacy)

#### PIRET VEERUS

(National Institute for Health Development)

#### OTT LAIUS

(State Agency of Medicines)

#### KRISTINA SEPP

(Estonian Pharmacies Association)

#### JANA LASS

(Tartu University Hospital,  
Estonian Society of Hospital Pharmacists)

#### MARIKA SAAR

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Estonian Society of Hospital Pharmacists)

#### ÜLLE-HELENA MEREN

(East-Tallinn Central Hospital,  
Estonian Society of Hospital Pharmacists)

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PIRET VEERUS (Estonia)

RAISA LAAKSONEN (Finland)

KIRSTI VAINIO (Finland)

INGUNN BJÖRNSDÓTTIR (Norway/Iceland)

KJELL H. HALVORSEN (Norway)

HELLE WALLACH KILDEMOES (Denmark)

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#### ERP KONVERENTS

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## SUGGESTED TOPICS FOR SCIENTIFIC PROGRAMME

- Innovations in pharmacy practice and research
- Professional and inter-professional issues and pharmacy education
- Healthcare services and pharmacists' interventions
- Pharmacoeconomics and pharmaceutical policy
- Ethical issues in pharmacy
- Social and inter-cultural issues
- Medication use and drug behaviour
- Patient safety and pharmacoepidemiology
- Medicines and health information
- Clinical pharmacy

NSPC&NNGCP 2015:



Innovative,  
Integrated and  
Individualised  
Care

Nordic Social Pharmacy and Health  
Services Research Conference &  
The Nordic Networking Group  
for Clinical Pharmacy

**June 3–5, 2015**

Dorpat Conference Centre  
Tartu, Estonia



[www.nspc2015.com](http://www.nspc2015.com)



The latest PHARMINE paper on:

**"Heterogeneity of pharmacy education in Europe" has been published in *pharmacy online* at:**

<http://www.mdpi.com/2226-4787/2/3/231>

Abstract.

The 1985 European Economic Community directive on pharmacy practice assumed that pharmacy education in the EEC was broadly comparable and that the European system was producing pharmacists with similar educational backgrounds. In the early 1990s the European Association of Faculties of Pharmacy questioned this. It surveyed pharmacy courses in the 11 EEC members and found that the emphasis was on chemical sciences with a wide variation in medicinal sciences. It was thought that European integration would produce greater harmonisation in pharmacy education.

In 2011, the PHARMINE (PHARMacy Education IN Europe) revisited this problem in 26 EU member states. In the almost 20-year interval between the 2 studies, comparability amongst training course had not improved. This article looks at the variability in EU pharmacy courses and the evolution in the pharmacy education with a shift from chemical to medicinal sciences. It questions whether the latter change parallels the evolution in the EU directive on pharmacy which recognises an increase in pharmacists' responsibilities in healthcare.

It looks at whether the existence of a predominately medicinal sciences course in a pharmacy department is linked to the attachment to a medical faculty and whether the existence of a predominately medicinal sciences course is linked to pre- or post-graduate specialisation in hospital / clinical pharmacy.

Other PHARMINE papers are available at:

<http://pcn-consultants.com/index.php?id=31>

# PHAR-QA

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*Quality Assurance in European Pharmacy Education and Training,*



Lifelong  
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PHAR-QA Quality Assurance in European Pharmacy Education and Training.





## Lifelong Learning Programme

PHAR-QA Quality Assurance in European Pharmacy Education and Training.