

# PHAR-QA

by PHARMINE

*Quality Assurance in European Pharmacy Education and Training.*



**The Newsletter**

*June, 2014*



Lifelong  
Learning  
Programme

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



# The PHAR-QA newsletter

June, 2014.

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

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

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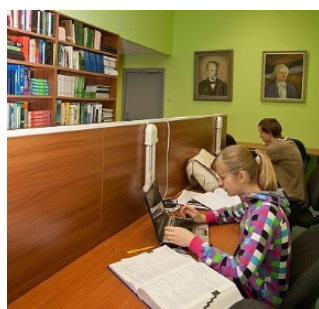
## Partner 5.

### The Department of Pharmacy, University of Tartu, Estonia.

The first connections of teaching pharmacy date back to the foundation of the University of Tartu in 1632. Already in 1842, the independent Institute of Pharmacy was established at the University of Tartu. Today two curricula in pharmacy have been accredited: the integrated bachelor and master programme lasts 5 years (300 ECTS) and doctoral programme 4 years (240 ECTS). Since 1945, assistant pharmacists have been educated in the Tallinn Medical School, renamed in 2006 to Tallinn Health College. The obtained education corresponds to BA according to the three cycle system of Bologna Declaration.

The Department of Pharmacy at the Faculty of Medicine is the only institution in Estonia providing the education in pharmacy at university level. The pharmacy curriculum has been compiled according to the recommendations on pharmaceutical education at higher education institutions (EU Directive 2013/55/EU amending Directive 2005/36/EC on the recognition of professional qualifications). It is in line with development plans of the University and Medicine areas.

The library of the Department of Pharmacy.



In the development of the pharmacy curriculum the principles of *Universitas* (provision of basic theoretical knowledge in pharmacy) and the needs addressed by healthcare system and public have been considered. Present pharmacy curriculum is pharmaceutical product oriented and based on medicinal subjects.

The mission of the Department of Pharmacy is to prepare highly qualified pharmacists but also to promote research and assist the organisation and development of the whole pharmacy system in Estonia. To perform this mission, the Department sees its goals as follows:

- to fill the state commission for educating pharmacists;
- to provide all pharmacy students with an education based on modern scientific concepts and international standards,
- to conduct doctoral studies in pharmacy in order to provide reproduction for academic and research specialists,
- to participate actively in development and promotion of all fields of pharmacy and to assist expertise and decisions made at the governmental level,
- to participate in work of international pharmacy organisations and committees, and promote international collaboration,
- to participate in process of improving professional qualification and competency of pharmacists and in work of attesting committees,
- to develop professional terminology in Estonian.

Currently the pharmacy curriculum is not given in English. However, international students could participate in research work

Teaching laboratory.



or take single courses based on individual learning and examination. In the recent years, interest towards the pharmacy curriculum by international students has been increasing.

In September 2005 the Department of Pharmacy moved to the Medical campus, with buildings of Chemistry and Physics locating nearby. At the Department of Pharmacy there are contemporary teaching conditions for pharmacy students. In the teaching laboratories tableting machine, granulator, spectrometers (IR, NIR, RAMAN, UV-vis), dissolution test apparatuses, GC and HPLC are available for laboratory works for pharmacy students. One seminar room is organised as a small community pharmacy.

The library of the Department of Pharmacy was established in 2005 with the main purpose to support and enhance independent work of pharmacy students. The collection consists of study and research literature from different pharmaceutical fields and it is being renewed constantly.

The pharmacy curriculum training is based on the course system. In the compulsory subjects taught in the Department of Pharmacy, lectures cover 32%, seminars 23% and laboratory works 45% of classroom work. Independent work has an integral part in the pharmacy curriculum. Research work and concomitant studies are compulsory subjects at the pharmacy curriculum. The research work has to be experimental or research-based and in addition to pharmacy disciplines could be performed on topics related to medicines or pharmacy and could be

supervised by other departments of the University of Tartu, other universities or appropriate institutions.

Research work enables close research cooperation between pharmaceutical, medical and natural sciences. Described training method gives an excellent possibility for pharmacy students to get experience in scientific work, draw plans for continuing education in doctoral studies and consider future academic career.

Practical training takes place at community and hospital pharmacies and is carried out during the spring semester of the fifth study year. The majority of pharmacy students are trained in the two University community pharmacies and at the hospital pharmacy of the University Clinic, both located in Tartu.

During 2005-2013 314 students have graduated from the Department of Pharmacy. The annual number of graduating students has varied from 26-46. Currently there are 120 undergraduate pharmacy students at the University of Tartu. The male students constitute 19% of the submitted students. Relatively many (~50%) students are from Russian gymnasiums (they are all Estonian citizens).

In the recent years, the number of pharmacy students who have used different exchange programmes – Erasmus, NordPlus and NordForsk for pharmacy training and traineeship has increased. The course based system of the pharmacy curriculum enable to take one semester or one academic year, not single courses at the partner universities. In addition, pharmacy students have used exchange programmes of IPSF to learn more about pharmacy practice in the countries of Asia and Africa.

Young pharmacists have the possibility to find employment in community and hospital pharmacy, representative offices of foreign drug companies and wholesale companies of medicines. About half of the graduates would like to work at the community pharmacies – the largest pharmacy sector in Estonia offering





Associate Professor  
Daisy Volmer.



professional occupation for pharmacists.

At the Department of Pharmacy, teaching and research are closely related. Due to a small number of academic staff involved in both activities, it is convenient to use scientific experience and research results in training where appropriate. At the same time students are involved in different research projects in order to complete their research work.

Currently, there are three main research tracks developed at the Department of Pharmacy: pharmaceutical technology as leading research area, drug analysis including pharmacognosy and social pharmacy. Target financing assigned by the Ministry of Education and Research of Estonia is dealing with solid state properties of pharmaceuticals and their modification possibilities.

Within this project the following research areas are covered:

- development of new multifunctional pharmaceutical excipients and co-processed materials;
- modification of physicochemical and pharmaceutical properties of drug substances by means of electrospinning;
- laserultrasonic-assisted electrospinning to prepare next-generation non-woven nanomedicines;
- multifunctional topical nanomedicines for wound healing;
- 3D printing of personalized medicines for paediatric and geriatric use and
- high-energetic amorphous solid dispersions and pharmaceutical processing.
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Research in drug analysis has been mostly based to the field of pharmaceutical analysis, including working out or adapting different methods of volumetric analysis, spectrometry, chromatography or capillary electrophoresis. One of the goals of this research work was to provide pharmacy students with the opportunity to gain experience in real scientific studies.

Main fields of research activities in pharmacognosy are investigations of chemical composition of local and international plant material, especially essential oil and polyphenolic constituents indifferent herbs and determination of biological activity of herbal extracts studied phytochemically, specifically cytotoxic activity and effects against *Chlamydia pneumoniae*.

Research in social and clinical pharmacy is mostly engaged with describing, evaluation and analysis of several primary health care services on the theoretical and practical levels.

The Department of Pharmacy participated in the PHARMINE survey of European higher education institutions delivering pharmacy education & training as associated partner with main activity of data collection from HEIs and production of country profiles. Currently the Department of Pharmacy is acting as a partner in the project Quality assurance in pharmacy education and training in Europe – PHAR-QA and is responsible for work package 4 – dissemination.

Professor Peep Veski.



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## PHAR-QA MO20 meeting

Ljubljana 24 May 2014

Chris van Schravendijk – Vrije Universiteit Brussel – MEDINE2 WP7L

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### Participation

*Partners:* J. Atkinson (P2), B. Bozic (P7), K. De Paepe (P1), N. Katavjavuori (P6), A. Koster (P10), A. Marcincal (P10), L Noël (P1), C. Rais (P9), A. Sanchez-Pozo (P3), D. Rekkas (P4), D. Volmer (P5).

*Excused:* J. Hirvonen (P6), A. Skowron (P8), C. Mircioiu (P9).

*Advisory Board:* M. Rouse, C. Van Schravendijk (report), K. Wilson.

*Stakeholders & Other participants:* L. Azzopardi (EAFP) M. Caramona (EAFP), N. Danchev (Univ. Sofia), Dvasidevic (Univ. Belgrade), S. Hocevar (EPSA), R. Jachowicz (EAFP), M. Kos (UL-FFA), A. Mestrovic (Pharma Croatia), F. Ortega (Alcala, Spain), A. Serracino Inglott (Univ. Malta), S. Srcic (UL-FFA), S. Ibric (Univ. Belgrade), V. Breidis (Lithuania), R. Zelko (Semmelweis univ. Budapest), A. Zlatkov (Univ. Sofia).

### Programme and meeting report

09h20 Jeffrey Atkinson (JA) – general introduction. All WP's (WP1 MNGT; WP2 IMP; WP3 QPLN; WP4 DISS; WP5 EXP) have to be successful in the end, there is no mechanism of compensation, so one weak WP might take the whole output down; therefore problems have to be anticipated in time. EACEA is very keen on correct financial procedures, as could be seen in the recent PHARMINE audit at VUB. JA announces contacts with Latin America (WP5 EXP) via A.S. Pozo.

09h25 Kristien De Paepe (KDP). Introduction & budgetary affairs.  
At first a few words in honor of Bart Rombaut – our former coordinator – who was a colleague of KDP. Due to the unexpected death of Bart Rombaut, an amendment to the grant agreement was submitted; and an extension of 6 months was obtained; end of project 31/03/2016 (submission final report 31/05/2016).  
Budget. 40% (1<sup>st</sup> installment of the eligible budget 143 K€) is already available. EAFP sponsoring is 14.5 K€. Staff costs for VUB and partners together with travel and website costs include 142 K€ so far, for all the payments already done. KDP emphasizes once more the importance of correct timesheets, with total days declared versus contract days (project description). JA will put a clarifying summary on Basecamp. All timesheets should be sent to P1 before 01/06/2014. Partners who have not spent 70% of their 1<sup>st</sup> installment, cannot receive the 2<sup>nd</sup> installment. So far, the total amount of days (603) for all partners, is OK; but for some individual partners not enough working hours were declared especially P8. Original mid-term report (MO18), is delayed to 1<sup>st</sup> July. But the table in slide 7 is also a tool to anticipate progress (or insufficient progress) in the network.

09h40 JA. MNGT.

Deadline for Athens meeting in May 2015. PHAR-QA booklet, presenting results of questionnaire, may be done. Although we have an extension of the deadline we should try to push the survey through ASAP. The EAFP 2015 Athens meeting was originally planned to mark the end of the PHAR-QA project. WP5 needs also to accelerate and A. Koster from EAFP will take this matter up with P8.

JA gives summary of the survey data in Excel via the six categories (university staff member; student, community pharmacist, industrial pharmacist, hospital pharmacist and other) and refers to some imbalance in the response rates. For statistical analysis we need at least 4 responses in each category, if so the box is white. The survey covers European HE area without Russia and Belarus.

Results for Northern region:

Denmark lacks responses in 5 categories. A. Koster will write to his contacts in industry, hospital and university pharmacy – Sandra Hocevar (EPSA) will contact the students. Estonia (3 categories lacking), Iceland is also too few, D. Volmer and Lilian Azzopardi will help with that.

For Latvia, D. Volmer takes action; idem for Sweden.

Norway, students is 0, community pharmacists, S. Hocevar (EPSA) will act here. KDP will contact PGEU/John Chave, general secretary or Jamie Wilkinson international affairs.

UK, Keith Wilson will look at students, community pharmacists, hospital pharmacists, only university is covered so far. KDP knows people in Nottingham, UK and will contact them.

This leaves Finland and Lithuania, J. Hirvonen is asked to contact them once more.

10h05 Borut Bozic. Results for Eastern region:

Now 382 answers, 18 countries (none from Moldova), 2/3 are small countries. To avoid problems with responses, telephones were made to explain. Altogether 432 contacts. With additional e-mail waves already 84% responses, which is very good for this region. Moldova (lacking) and Austria (only 1), but answers will come. EASP will help. Moldova: can be approached; but apparently there is only one faculty; and no possible contacts were mentioned.

Turkey not yet completed (only 8 student replies), colleagues from Ankara (EAFP hosts 2013) have not responded yet. In the next few weeks these issues will be dealt with. Dimitri Rekkas has contacts. VUB (KDP) has VUB Erasmus students in Ankara on a regular basis.

Important remark that threshold of 4 answers cannot be reached in small countries like Montenegro, while this is sometimes still a problem with big countries like Germany. Regarding the later, KDP will take action.

Albania: no member of student association, but 5 staff members already replied. Borut Bozic will try again. He will use a deadline to push. Dimitri Rekkas will also try.

Austria: S. Hocevar (EPSA) will motivate them, when exams are finished, plus community pharmacists as well.

Kosovo: Borut will contact again. A.S. Pozo will meet people in Kosovo in June and motivate them as well.



Bosnia: Several people will be contacted; low numbers are possibly due to recent inundations. We can contact Arijana Mestrovic for help.

Bulgaria: S. Hocevar (EPSA) will act students. N. Danchev (Univ. Sofia) and A. Zlatkov (Univ. Sofia) were at the conference and attended the PHAR-QA session. They offered to help.

Bozic: personal anonymous responses are required – the survey is not asking for position papers from chambers, associations or pressure groups.

Hungary: Private community pharmacist sector will be contacted. Also contacts with Szeged will be followed-up. R. Zelko (Semmelweis univ. Budapest) was at the PHAR-QA session.

Serbia: 5 staff members answered. S. Ibric (Univ. Belgrade) and Dvasidevic (Univ. Belgrade) attended the PHAR-QA session

Slovakia: there are many students in Slovakia from the Czech Republic. Bozic has contacted the dean in Bratislava, but in vain, no response.

10h50 Dimitri Rekkas (DR). Results for Western region:

Not only rows (results per country), but also columns (sum per category) should be looked at. We should keep the balance between the countries and the several professional subgroups. Sometimes answers are not received because apparently they first have to be discussed.

JA: it is an anonymous individual response; they have to reply as individual but also to forward the questionnaire to other individuals. In the next e-mail wave two sentences need to be added to avoid such a reflex (please do not negotiate your answers with colleagues). Should we change the questionnaire if some comments seem to make sense? JA: DELPHI process has a particular way to deal with this, but so far there is no clear pattern in the comments.

Paper regarding the adequacy of response rated in surveys (D.D. Nulty et al). Required response rates by class size. So far in several cells we are below the minimum. Response rates more than 60% are realistic.

Belgium and Germany: KDP will handle this.

Greece: Is OK except community and other (DR, there is no other). Regulators (DR can do it).

Ireland: Keith Wilson will do it.

Switzerland: EPSA Student organization, congress in October.

A. Marcincal has contacts in Geneva (Switzerland). DR will try to find new contacts.

The Netherlands: Andries Koster will do it.

11h20 Antonio Sanchez Pozo. Results for Southern region:

Basecamp, too many mails (updates). Basecamp recap. Sometimes e-mail communications on this e-mail alerts, should be de-activated. Time line diagrams are useful.

Andries Koster: problem of finding the final version. Time line can be useful, but is there for all issues. Time line should be used more often.

WP2, implementation. Questionnaire sent to all associations to distribute the document among the members. Often more personal messages were needed. Antonio sent messages to friends that would really help. Many web pages were inadequate. Questionnaires were sent 4 times, the introduction letter was sent in their own



language. E-mail errors should be forwarded to JA to clean the data base. Also new e-mail addresses should be forwarded to JA.

Contacts with the chambers usually were fruitful with many responses, although they thought that they had to give an official answer (see remark of DR). Often the responses were philosophical but the reply to '*please make the questionnaire*' remained absent.

WP4, dissemination.

WP5, exploitation. Contacts with Latin America; all were very interested with great responses. Video conferences. UGR agreement.

Spain shows a good response rate except for industrial pharmacist.

France: A. Marcincal will help.

Italy: DR will do it.

Malta: was only sent to faculty of Pharmacy, need to do better, Lilian Azzopardi will help.

Portugal: M. Caramona (univ. Coimbra) will do it.

Note: Several delegates gave their e-mail addresses to Lea and can be contacted to send the survey to their students, hospital pharmacists, university staff and community pharmacists.

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Alexander Zlatkov alexbz2000@yahoo.com

Nikolai Danchev nikolai.danchev@gmail.com

- 11h40 D. Volmer. (WP4 DISS)  
Newsletter of April was sent to 700 e-mail addresses. Next is on this meeting in June issue. PHAR QA website will move to new platform, with better information access from different regions.  
Stats of website: 100 views/month. Main topics: what it is, partners, advisory board, mission statements and events. Countries: best is France, then Belgium, 175 for Spain, Estonia 144. USA: 39. Paper in Pharmacy (doi 3390/pharmacy2020161). The Production of a Framework of competences for pharmacy practice in the European Union. CvS will sent the pdf of the MEDINE booklet from Edinburgh to JA for dissemination within the PHAR-QA group. Also Constantin Mircioiu has published two research papers in Farmacia, 2014.  
E-mail reminder and message in newsletter on project outcomes. Print is often again a better product to achieve the required attention.  
Erasmus meeting on P4/UoA, one day event in Thessaloniki.
- 11h55 Cristina Rais. (WP3 QPLN)  
Q-plan questionnaire is discussed, which is distributed in the auditorium. Then over to the SOP-activities, with all aspects that need to be covered.  
There will be a meeting in November in Brussels in parallel to PHAR-IN specifically with the people of WP5.
- 12h10 JA is closing the meeting. Despite the recent problems the project is running very well. Special thanks to Kristien and to Lea for their great contributions.

**Conclusion:** It was a very interactive and useful meeting and the participants had sufficient opportunity to raise their points.

Almost all stakeholders were present and they participated actively. Many engagements were taken up during the meeting and have to materialize during the coming weeks, especially for activating target groups in each of the six categories for completing the survey. These engagements are crucial for the survey –and hence the whole project- to succeed. Follow-up of these engagements and their outcomes will be done from Brussels by KDP.

A group picture was taken during the break:





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

The PHAR-QA (*Quality assurance in European pharmacy education and training*; <http://www.phar-qa.eu/>) 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://www.pharmine.org/>) .

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.



## Lifelong Learning Programme

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



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