### Report from the DAY 3 of the ERASMUS+ BIP European Training School titled

## "Day with the ESCP - European Society of Clinical Pharmacy"

organized at the Faculty of Pharmacy, Charles University, Czech Republic

As part of the professional program of the ERASMUS+ BIP European Training School on "Artificial Intelligence in Healthcare, Clinical Pharmacy, and Optimization of Pharmacotherapy" (28.4. - 2.5.2025), the Day with the ESCP was organized on April 30th, 2025 as a lecture and discussion day with the international and local students, academicians and invited guests from the ESCP - European Society of Clinical Pharmacy.

Among ESCP representatives attended this meeting particularly the President of the ESCP - PharmDr. Monika Lutters, Ph.D. (Switzerland), Chair of the Research Committee of the ESCP - prof. Martin Henman (Ireland) and Chair of the Special Interest Group on Deprescribing ESCP - prof. Stephen Byrne (Ireland). This day was also coorganized in collaboration with the representatives of the NETPHARM project, prof. Petr Pávek, the principal investigator, and Assoc. Prof. Daniela Fialová, PharmD, Ph.D., the chair of WP4 of the NETPHARM project. Among Czech speakers were invited representatives of practicing clinical pharmacy workplaces in the Czech Republic - PharmDr. Dalibor Černý, Ph.D., the chair of the Clinical Pharmacy Department at the Hospital Liberec, Czech Republic and PharmDr. Jan Hartinger, Ph.D., a clinical pharmacist at the Department of Clinical Pharmacology and Pharmacy of the General Faculty Hospital, Prague, Czech Republic.

The event was organized in the new campus of the Faculty of Pharmacy, Charles University - FoP CUNI. After welcoming of participants by Assoc. Prof. Fialová and by prof. Tomáš Šimůnek, the Vice-Dean for the Strategic Development of the Faculty, followed a lecture of prof. Petr Pávek about scientific activities of the project NETPHARM, funded by the Czech Ministry of Education, Youth and Sports for the period 2023 - 2028. Goals of this project are to support pharmaceutical research by not only producing high-impact publications and top international grants, but also by translating the innovative products into clinical practice and other practical sectors. The aim of WP4 is to investigate the new methods of the individualization of drug schemes in older adults with cardio-hepatorenal or frailty syndromes and to develop the first research collaborative network of the Czech clinical-pharmacy workplaces in acute and ambulatory care.

### Lectures of the ESCP representatives on development of clinical pharmacy

PharmDr. Monika Lutters, Ph.D. outlined the ESCP mission to advance the quality and innovations in clinical pharmacy education, practice, and research. She emphasized the importance of building networks and mutual learning and invited participants to

upcoming ESCP events: the autumn ESCP symposium in Grenoble, France (26–28 November 2025), the spring workshop on Medication Safety organized in Innsbruck, Austria (20 February 2026), and a series of thematic monthly online webinars. She introduced also ESCP committees, Special interest groups (SIGs), and best practice papers initiative of the ESCP emphasizing the current best achievements in clinical pharmacy.

Prof. Martin Henman presented the ESCP Research Committee activities, which support research collaboration of the society across generations of researchers and encourages the development of practical tools and methodologies for research, e.g. "How to" series of educational materials supporting advancements in research skills of the ESCP members (e.g. "How to write a scientific paper ", "How to write a research grant" etc.). Prof. Henman reminded the audience that researchers should not be complacent, but rather "sufficiently anxious and critical to themselves". He also presented to young students various research works of the ResCom ESCP, including high quality papers in top scientific journals helping to support development of clinical pharmacy research at an international level.

Prof. Stephen Byrne highlighted several past and ongoing major European research projects in clinical pharmacy, e.g. projects TRUST, SENATOR, OPERAM, and OPTIMATE. He stressed in his lecture also the need for clinically trained pharmacists to interpret complex trial data. He shared his experience with the development of AI-driven clinical tools and long-term effort in conducting various clinical pharmacy trials, including randomized controlled trials. He emphasized major barriers and facilitators of clinical pharmacy multicentric research.

























Lectures of the representatives of the Czech clinical pharmacy community on advances in development of the Czech Clinical Pharmacy field

PharmDr. Jan Hartinger, Ph.D. presented in his lecture an overview of the progress made in the development of clinical pharmacy education and practice in the Czech Republic over the past two decades. He discussed historical milestones, legislative changes, and the development of methodology for interventions of clinical pharmacists in acute and ambulatory care that helped to achieve paid performances for the work of clinical pharmacists in the Czech Republic. He also emphasized a critical role of collaboration of clinical pharmacy workplaces, the quality of the postgraduate training in clinical pharmacy and the importance of the documentation of clinical pharmacists' interventions, which have been key in demonstrating the value of the work of clinical pharmacists and in securing reimbursement from health insurance companies in the Czech Republic.

PharmDr. Dalibor Černý, Ph.D. introduced an innovative MERIE tool, which is an AI-based software designed to identify patients at higher risk of drug-related problems by using a specifically developed scoring system. The tool prioritizes patients for clinical pharmacists' interventions and highlights also a key information for decisions of clinical pharmacists - prescribed medications, relevant laboratory parameters, and includes a structured coding system for pharmacotherapy recommendations that helps to fasten the documentation of all processes.









# Ceremonial event with prices awarded to the top 3 clinical pharmacy departments in the Czech Republic

At the end of the morning session there was organized a ceremonial event where 3 prices were awarded to the 3 Departments of clinical pharmacy in the Czech Republic that significantly helped in development of clinical pharmacy services at the national level.

The 1st price was awarded to the Clinical Pharmacy Department of the Faculty Hospital Bulovka, Prague, particularly to PharmDr. Jana Gregorová, Ph.D., Head of the Department, and Mgr. Jan Kvaček, Director of the Faculty Hospital Bulovka (represented at the ceremonial event by MUDr. Lívia Večeřová, Ph.D., MBA, Deputy for Science, Research and Grant Activities and the Representative of the Deputy for Medical and Preventive Care for the Complement). This 1st price was awarded for: I/ the extraordinary effort in creating the legislative environment for the development of clinical pharmacy services in the Czech Republic and for establishing clinical pharmacy workplaces and departments in acute and ambulatory care at the national level, II/ for enforcement of paid performances for clinical pharmacists in acute and ambulatory care in the Czech Republic during negotiations with health insurance companies , and III/ for significant support of postgraduate training of specialists in clinical pharmacy field and for the help in opening of other clinical pharmacy positions at clinical pharmacy departments/workplaces in the Czech Republic.

The 2nd price for the development of clinical pharmacy field in the Czech Republic was awarded to the Department of Clinical Pharmacy and to the Management of Na Homolce Hospital, Prague, Czech Republic, particularly to PharmDr. Milada Halačová, Ph.D., Head of the Department of Clinical Pharmacy, and MUDr. Petr Polouček, MBA, Director of the Hospital Na Homolce, Prague, Czech Republic. This price was awarded for: I/the substantial effort in supporting stabilization of clinical pharmacy specialty training at the Department for Postgraduate Training in Clinical Pharmacy of the Institute for Postgraduate Studies in the Healthcare, Prague, Czech Republic during unstable legislative period (in the time of no paid performances and non-existing positions of clinical pharmacists in the Czech healthcare), II/ for significant support of applied research gaining evidence for getting paid performances for the ambulatory care clinical pharmacy services and for conducting research opening the doors to the development of clinical pharmacy services social in the care environment, III/ for supporting high expertise in provision of advanced clinical pharmacy services and for training of specialists skilled to lead other clinical pharmacy departments in different regions of the Czech Republic.

Finally, the 3rd price in clinical pharmacy development was awarded to the Department of Clinical Pharmacy and to the Management of Central Military Hospital, Prague, Czech Republic, specifically to PharmDr. Irena Murínová, Ph.D., Head of the Department of Clinical Pharmacy, and plk. gšt. MUDr. Václav Masopust, Ph.D., MBA, LL.M., DBA, Director of the Central Military Hospital, Prague, Czech Republic (represented during the event by Nikola Mrázková, MSc., Head of the Center for Complex Care).

This price was awarded for: I/ the establishment and leadership of the Association of Departments and Workplaces of Clinical Pharmacy in the Czech Republic and for chairing activities of this association, II/ for the help with the medialization of the Czech clinical pharmacy activities and for achievements in professional and legislative areas, and III/ for the significant support in establishing other independent clinical pharmacy departments and workplaces in acute and ambulatory care in the Czech Republic.

















# Meeting of international and local students with Czech practicing clinical pharmacists

Special afternoon session brought together practicing clinical pharmacists and international and local pharmacy students that joined the event to explore career paths and experiences of skilled clinical pharmacists in the field. The discussion focused on the variability of clinical pharmacy practices across Europe and the potential for crossborder learning. Topics included reimbursement models, structured training programs, and the personnel frameworks needed to sustain clinical pharmacy services in hospitals, primary and tertiary care. Lively discussions between practicing clinical pharmacists and students were supported by Assoc. Prof. Fialová, Chair of the University Centre of Clinical Pharmacy, by ViceDean for Pregraduate Studies Assoc. Prof. Radim Kučera and the Faculty Erasmus Coordinator Prof. Přemek Mladěnka. They held also short introductory lectures and welcomes for participants at the beginning of the event. The discussion was translated bv bilingual master degree student.









## **Key Takeaways Messages that International BIP ERASMUS students summarized after this event:**

- Clinical education for pharmacists should begin early, ideally as integrated part of master's degree programs and since early years of the master's degree studies
- International collaboration is essential networking helps clinical pharmacists to adapt evidence-based clinical practices and procedures to their local healthcare systems
- Clinical pharmacy is a rapidly growing field and Czech practicing clinical pharmacists expressed clearly how rewarding the profession is - not only by improving patient health outcomes but also by alleviating the workload of physicians and nurses
- Effective clinical pharmacy services lead to better use of public healthcare resources and are necessary part of the modern healthcare systems.
- Clinical pharmacy is deep and real clinical pharmaceutical field that needs its own directions of development of pre- and postgraduate education, clinical practice and clinical research

The "Day with the ESCP" in Hradec Králové reinforced the shared vision of a connected, evidence-driven, and patient-focused clinical pharmacy community across Europe.





Texts: Participants of the European training school from 10 Universities

Photos: Jan Škop, Monika Trdá

### Acknowledgment

This event was organized as part of the European training school of the ERASMUS+ BIP program of the Faculty of Pharmacy in Hradec Králové, Charles University, Czech Republic and by the project NETPHARM.













The project New Technologies for Translational Research in Pharmaceutical Sciences /NETPHARM, ID CZ.02.01.01/00/22\_008/0004607, is co-funded by the European Union.

#### Other co-organizers were:

- Researchers from the European consoricum of the I-CARE4OLD H2020 project
- Members of the Research Committee of the ESCP European Society of Clinical Pharmacy
- Members of the Special Interest Group on Deprescribing of the ESCP European Society of Clinical Pharmacy
- University Center of Clinical Pharmacy, Faculty of Pharmacy, Charles University
- Researchers from the WP4 team of the NETPHARM project





















This event was supported also by the I-CARE4OLD project of the European Union's Horizon 2020 research and innovation programme under the grant agreement No 965341.

The projects and organizations supporting the event played no role in formulation of the texts of this report.