EFLM SYMPOSIUM
Education in Clinical Chemistry and Laboratory Medicine
EFLM EUROPEAN FEDERATION OF CLINICAL CHEMISTRY AND LABORATORY MEDICINE
CZECH SOCIETY OF CLINICAL BIOCHEMISTRY
in collaboration with:
UEMS
EC4

Postgraduate Training in Laboratory Medicine in Poland and the EC-4 European Syllabus 2012

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PTDL

Health care professionals, which can specialize in laboratory medicine

Doctors

Scientists

LABORATORY MEDICINE

Scientists = Laboratory Diagnostitians

Laboratory Diagnostitians

- Graduates of the Faculties of Laboratory Medicine at Medical Universities

- Pharmacists, biologists, biotechnologists, chemists and others **- after completing a two-year post-graduate studies at the faculty of laboratory medicine**

Laboratory diagnostitian

- Regulated profession - **the law on the laboratory diagnostics of July 27, 2001.**

- Professional corporation – **the National Chamber of Laboratory Diagnostitians**

KIDL (NCLD) is involved in postgraduate training of laboratory diagnosticians

Legislation

DZIENNIK USTAW
RZECZYPOSPOLITEJ POLSKIEJ

REGULATION OF THE MINISTER OF HEALTH of April 26, 2004 on specialization and obtaining the title of specialist by **laboratory diagnostitians** (changed 20 December 2013)

Legislation

DZIENNIK USTAW

RZECZYPOSPOLITEJ POLSKIEJ

REGULATION OF THE MINISTER OF HEALTH of January 2, 2013 on specializations of **doctors and dentists**

Medical Centre of Postgraduate Education

- ✓ Specialization programs
- ✓ Specialization courses
- ✓ Accreditation of institutions engaged in internships

Centre of Medical Exams

- ✓ Examination regulations
- ✓ Examination tests
- ✓ Examination commissions
- ✓ Administrative support

Specialisations for laboratory diagnostitians (scientists)

Medical laboratory diagnostics
Medical laboratory genetics
Medical laboratory immunology
Medical microbiology
Medical laboratory transfusiology
Medical laboratory toxicology
Public health
Environmental health
Medical laboratory hematology
Medical cytomorphology
Medical laboratory parasitology
Epidemiology
Forensic laboratory genetics
Forensic laboratory toxicology

Specialization can be started after two years of work in the diagnostic laboratory

Specialization program in laboratory diagnostics

- Doctors: **68 months**
- Scientists: **48 months**

- **Forms of training**

✓basic internship

✓targeted internships

✓compulsory courses

✓complementary courses

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The EC4 European Syllabus for Post-Graduate Training in Clinical Chemistry and Laboratory Medicine: version 4 – 2012

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Knowledge
Skills
Competencies

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Laboratory medicine: core **knowledge, skills and competencies**

I. Basic knowledge requirements
II. Indications for laboratory medicine procedures
III. Influence of collection and storage of specimens
IV. Analytical principles and techniques
V. Analytical evaluation of laboratory methods
VI. Clinical evaluation of laboratory methods
VII. Case-related medical evaluation of laboratory tests
VIII. Clinical training
IX. Research and development; audit
X. Laboratory management and quality assurance

Specialization program in laboratory diagnostics for doctors & scientists

- **General knowledge**

✓Factors affecting results of laboratory tests incuding pre-, post- and analytical errors; biological variability

✓Biologicsl material collection and handling

✓Reference ranges, cut-off values and allowable error limits

✓Diagnostic assessment of the test – sensitivity, specificity, predictive values, ROC curves analysis

✓Organization of the laboratory; LIS

✓Quality management; accreditation

✓Analytical techniques; analytical evaluation of laboratory methods

Specialization program in laboratory diagnostics for doctors

- **Competencies & skills to be acquired**

✓Ability to create diagnostic algorithms containing laboratory tests

✓Ability to consult the selection of laboratory tests and results interpretation

✓Ability to direct a diagnostic laboratory

✓Ability to participate in preventive medicine activities

✓Ability to direct the specialization in laboratory diagnostics

✓Ability to participate in the training of other health care professionals

✓Ability to participate in scientific projects

Specialization program in laboratory diagnostics for scientists

- **Competencies & skills to be acquired**

Ability to solve the problems associated with the total analytical process including the final authorization and laboratory interpretation of results

- ✓Ability to consult the selection of laboratory tests and results interpretation
- ✓Ability to direct a diagnostic laboratory
- ✓Ability to participate in preventive medicine activities
- ✓Ability to direct the specialization in laboratory diagnostics
- ✓Ability to participate in the training of other health care professionals
- ✓Ability to participate in scientific projects

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Laboratory medicine disciplines: specialist knowledge

- ✓ Clinical chemistry/immunology
- ✓ Haematology/blood transfusion (including cells, transfusion serology, coagulation, and cellular Immunology)
- ✓ Microbiology/virology (bacteriology, parasitology, and mycology)
- ✓ Genetics, in vitro fertilisation

Specialization program in laboratory diagnostics for doctors

- **Laboratory medicine disciplines – specialist knowledge:**

✓Clinical chemistry
✓General analytics
✓Hematology, hemostasis
✓Toxicology & TDM
✓Immunology
✓Transfusiology
✓Microbiology (selected issues)
✓Organs injury & dysfunction
✓Pregnancy monitoring
✓Pediatric clinical chemistry

Specialization program in laboratory diagnostics for scientists

- **Laboratory medicine disciplines – specialist knowledge:**

✓Clinical chemistry
✓General analytics
✓Hematology, hemostasis
✓Toxicology & TDM
✓Immunology
✓~~Transfusiology~~
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✓Pregnancy monitoring
✓Pediatric clinical chemistry

Version 20131003

EC4 new criteria for Equivalence of Standards 2013

Which topics of the EC4 Syllabus does the specialist training include? ***➔ALL***

Clinical chemistry

Immunology **Medical laboratory immunology**

Haematology/blood transfusion (including cells, transfusion serology, coagulation, and cellular immunology) **Medical laboratory hematology / transfusiology**

Microbiology/virology (bacteriology, parasitology, and mycology) **Medical Microbiology**

Genetics, In vitro fertilisation **Medical laboratory genetics**

In summary…. Postgraduate training in Laboratory Medicine in Poland, albeit so complicated, is in accord with the EC-4 European Syllabus 2012

Thank you for your attention

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