Drug-resistant (DR) tuberculosis (TB) is a major global public health (PH) problem worldwide. Significant progress in the development of rapid molecular diagnostic techniques for DR-TB has been achieved, accelerating the detection process. The pipeline of novel TB medicines has expanded substantially. Implementing these innovations requires a coordinated approach, with the involvement of all aspects of the programmatic management of DR-TB-related activities, and strong coordinating leadership.

The WHO Collaborating Centre for Research and Training in Management of MDR-TB (WHO CC) in Riga, Latvia was established in 2004 with the objective of providing high quality, evidence-based capacity development at all levels (individual, organizational and institutional), drawing on worldwide evidence and in line with the latest developments and WHO guidance. Capacity development activities are structured according to the latest scientific developments in practical aspects of the treatment and management of DR-TB.

<table>
<thead>
<tr>
<th>Time</th>
<th>Course</th>
<th>Language</th>
<th>Registration deadline</th>
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<tbody>
<tr>
<td>28/05-01/06/2018</td>
<td>Programmatic introduction of the new and re-purposed anti-TB medicines for treatment of DR-TB</td>
<td>Russian</td>
<td>16/04/2018</td>
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<td>Line Probe Assay technology - rapid molecular drug susceptibility test available for the diagnosis of DR-TB</td>
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<tr>
<td>6-15/08/2018</td>
<td>Programmatic and clinical management of DR-TB in order to achieve sustainable development goals</td>
<td>English</td>
<td>02/07/2018</td>
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<tr>
<td>10-19/09/2018</td>
<td>Programmatic and clinical management of DR-TB in order to achieve sustainable development goals</td>
<td>Russian</td>
<td>02/08/2018</td>
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<tr>
<td>22-26/10/2018</td>
<td>Programmatic introduction of the new and re-purposed anti-TB medicines for treatment of DR-TB</td>
<td>Russian</td>
<td>10/09/2018</td>
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Upon request, different types of capacity development activities are designed and organised for TB laboratory management, adjuvant surgery for TB, childhood TB, effective health communication and training of trainers.

WHO Collaborating Centre for Research and Training in Management of MDR-TB
TB and Lung Disease Centre of Riga East University hospital
Course director: Dr. Liga Kuksa, liga.kuksa@aslimnica.lv, Course coordinator: Ms. Liga Rusmane, e-mail: liga.rusmane@aslimnica.lv, Tel. + 371 67048246
www.tblatvia.com
Course Modules:

- Epidemiology of TB, MDR-TB, XDR-TB (extensively drug-resistant) and TB/HIV; social determinants, migrants and other vulnerable groups.
- Development of the DR-TB epidemic at a crossroads; can we prevent the development and spread of DR-TB?
- Perspectives of the National Tuberculosis Program (NTP) on implementing innovative diagnostics and treatment for MDR-TB.
- Updates on diagnosis of TB and TB drug resistance; TB diagnostic algorithm proposed by the European TB Laboratory Initiative (ELI).
- Designing an effective regimen using clinical case scenarios from the field; clinical issues, including patient perspectives.
- Updates on treatment of drug-susceptible TB and patient care.
- TB drug safety considerations; monitoring and management of adverse events; the role of audiometry in supporting the use of novel agents; active drug safety monitoring and management (aDSM).
- Use of shorter MDR-TB regimens in European regions; the ethical imperative to move to shorter regimens.
- Treatment of MDR-TB in special situations, including children, pregnancy, and breastfeeding.
- TB/HIV coinfection.
- Adjuvant therapies in M/XDR-TB management: nutrition, surgery, rehabilitation.
- Fundamentals of infection control; FAST: a TB infection control strategy.
- Management of failures and chronic patients in an era of new drugs and regimens; the role of palliative care.
- Developing models of care for MDR-TB patients; people-centered TB care, including ethical issues, human rights, and treatment in hospital or outpatient settings.
- Monitoring of treatment effectiveness and outcome evaluation for TB and MDR-TB patients.
- Procurement and supply management (PSM).

Target audience:
Clinicians, staff of national TB programs, persons responsible for diagnostics and treatment of DR-TB, from countries with high levels of DR-TB

Duration:
9 business days (from Monday to Wednesday, including Saturday)

Language: Russian/English

Training fee:
1930 EUR, including training materials, site visit, local transport, catering during working hours/on working days, social events, visa support, reduced per diem (30 EUR x 11 days)

Additional costs:
hotel accommodation (from ~ 40 EUR to ~ 80 EUR per night), international flight, visa

Contact information
www.tblatvia.com

Course director:
Dr. Liga Kuksa, liga.kuksa@aslimnica.lv

Course coordinator:
Ms. Liga Rusmane, e-mail: liga.rusmane@aslimnica.lv
Course Modules:

• Epidemiology of TB, MDR-TB, XDR-TB and TB/HIV; social determinants.

• Perspectives of the National Tuberculosis Program (NTP) on implementing innovative diagnostics and treatment for M/XDRTB.

• Laboratory diagnosis of TB and TB drug resistance; TB diagnostic algorithm proposed by the European TB Laboratory Initiative (ELI).

• Programmatic approach to the treatment of rifampicin-resistant TB (RR-TB); the role of clinicians in the introduction of new and repurposed drugs and regimens for different types of resistance.

• Clinical issues in new drug introduction, regimen design, and drug-drug interactions; off-label use of new TB drugs; use in special populations.

• Role of patient-centred care, support and adherence-support package; ethical considerations and informed consent; examples of patient consent.

• Adjuvant therapies; the role of surgery using new and re-purposed drugs.

• Drug safety; scope of safety data collection and definitions; active drug safety monitoring and management (aDSM).

• Clinical management of adverse events of interest: peripheral neuropathy, myelosuppression, prolonged QT interval, optic nerve disorder (optic neuritis), hepatitis, acute kidney injury, hearing impairment, hypokalemia, and hypothyroidism.

• Monitoring and evaluation requirements for the use of new and re-purposed drugs; length of therapy with new drugs.

• Pharmacokinetic and minimum inhibitory concentration (MIC) variability as determinants of TB clinical outcomes in adults and children - state of the evidence.

Target audience:

Clinicians, staff of the national TB programs, responsible for diagnostics and treatment of DR-TB, from countries with high level DR-TB

Duration:

5 business days (from Monday to Friday)

Language: Russian

Training fee:

1280 EUR, including training materials, site visit, local transport, catering during working hours/on working days, social events, visa support, reduced per diem (30 EUR x 6 days)

Additional costs:

hotel accommodation (from ~ 40 EUR to ~ 80 EUR per night), international flight, visa

Contact information

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Course director:

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Course coordinator:

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liga.rusmane@aslimnica.lv
This hands-on work training was designed by combining the latest evidence and recommendations on rapid molecular diagnostic methods with practical work at the TB Supranational Reference Laboratory in Riga, Latvia.

Course Modules:

- Epidemiology of TB, MDR-TB, XDR-TB (extensively drug-resistant) and TB/HIV. Social determinants, migrants and other vulnerable groups.
- Development of DR-TB epidemic on crossroads. Can we prevent development and spread of DR-TB?
- National Tuberculosis Program (NTP) perspectives on implementing innovative diagnostics and treatment for MDR-TB.
- Updates on diagnosis of TB and TB drug resistance. Proposed TB diagnostic algorithm by the European TB Laboratory Initiative (ELI).
- Using of shorter MDR-TB regimens in Europe regions.
- TB Laboratory services and laboratory network.
- Molecular line probe assays for the detection of mutations associated with resistance to first and second line TB drugs.
- Internal and external quality control at different diagnostic methods.
- Infection control requirement for laboratories at different levels.
- Drug susceptibility testing for *Delamanid* and *Bedaquiline* (Linezolid).

Target audience:

TB Laboratory specialists

**Duration:**
5 business days (from Monday to Friday)

**Language:** Russian

**Training fee:**
1360 EUR, including training materials, site visit, local transport, catering during working hours/on working days, social events, visa support, reduced per diem (30 EUR x 6 days)

**Additional costs:**
- hotel accommodation (from ~ 40 EUR to ~ 80 EUR per night),
- international flight, visa

**Contact information**

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