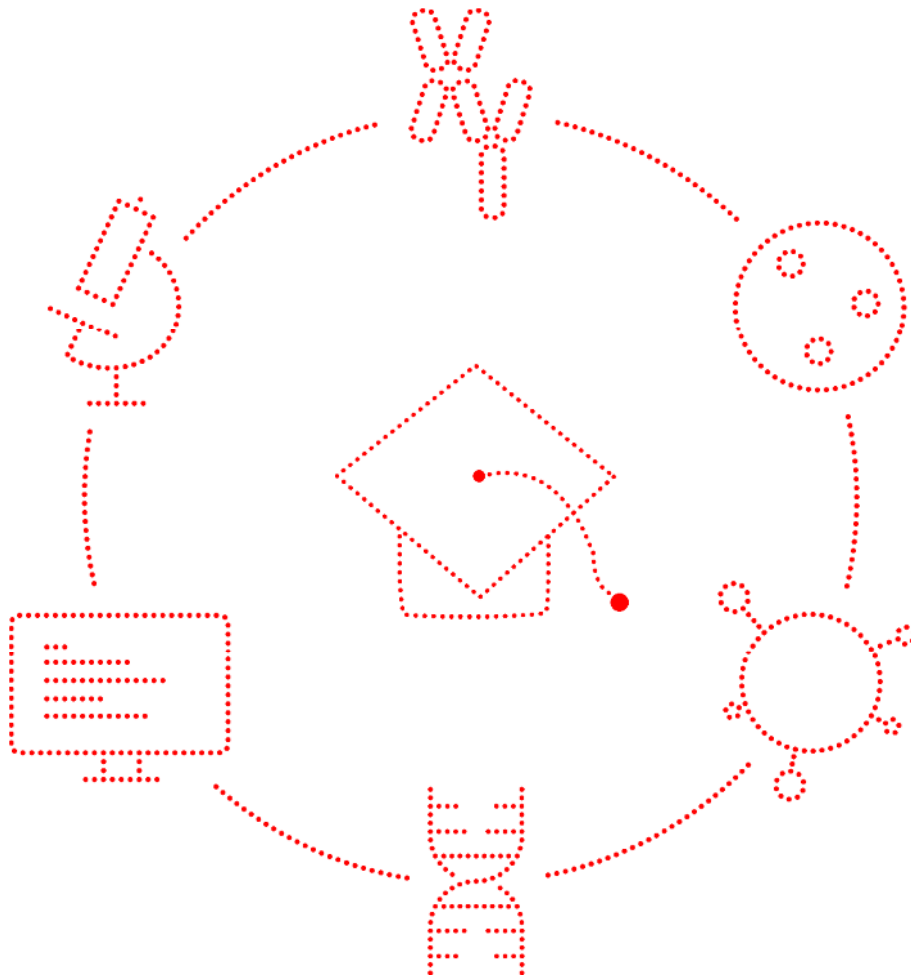


MLL Academy



**State of the art diagnostics
in hematological malignancies**



MLL Academy

State of the art diagnostics in hematological malignancies

Overview

This 5-day virtual event provides an update on the diagnostics in hematology based on up to date guidelines and recommendations. Further, an overview on the diagnostic work-up of hematological malignancies performed at MLL is presented. Lectures and practical session are combined in order to provide a comprehensive insight.

A set of lectures covers all disease entities. These presentations provide state of the art diagnostic requirements based on guidelines and recommendations and give insight into the diagnostic work-up performed at MLL. At the end of each presentation, time is reserved for questions & answers. A second set of lectures focusses on concepts of MLL and a third set of lectures covers the methods applied at MLL, including sessions on whole genome sequencing and artificial intelligence. Practical sessions will allow a deeper insight into the diagnostic work-up at MLL. In addition, a virtual lab tour and videos of certain lab processes are offered.

Course details

Course date spring, 2022	25 th – 29 th of April 2022, 8.00 a.m. to 4.15 p.m.
Format	online
Maximum group size	15 persons
Costs	€ 1.200,00
Application deadline	28 th of February 2022

For further information and course registration please contact: sekretariat@ml.com



Course content

General lectures

- Hematological malignancies - WHO classification
- Overview diagnostic requirements
- Lectures on disease entities: CML, MPN, AML, CHIP, MDS, ALL, MBL & CLL, Lymphomas, MGUS & Multiple Myeloma

Lecture Structure:

- Diagnostic requirements according to guidelines and recommendations
- Diagnostic work-up at MLL
- Questions & answers

Lectures on concepts of MLL and group discussions (MLL insights)

- Introduction of diagnostic departments of MLL
- Virtual lab tour and overview on departments
- Automation and IT at MLL
- Initial analyses and diagnostic workflow
- Discussion: Unclear initial diagnosis
- Discussion: Future of hematological diagnostics
- IVDR and its challenges

Lectures on methods applied at MLL

- Cytomorphology
- Immunophenotyping
- Chromosome banding analysis
- Fluorescence in situ hybridization (FISH)
- Molecular genetics and next-generation-sequencing
- Whole genome sequencing (WGS)
- Bioinformatics
- Artificial Intelligence (AI)

Interactive sessions

- Cytomorphology: microscopy of bone marrow & blood smears
- Immunophenotyping: data analysis, discussion of difficult cases
- Chromosome banding analysis: chromosome quiz, evaluation & reporting, case discussion
- FISH: analysis & interpretation
- Molecular genetics: PCR evaluation & reporting
- Sequencing: variant interpretation & reporting
- Integrated diagnostics
- Artificial intelligence



Preliminary Program

Monday, 25 th of April 2022			
08:00	08:15	Introduction	Welcome
08:15	09:15	Introduction	Course overview and introduction of participants
09:15	10:00	Clinical	WHO classification: hematological malignancies overview of diagnostic requirements
Break			
10:30	11:00	MLL insights	Departments of the MLL
11:00	12:15	MLL insights	Virtual lab tour
Lunch Break			
13:15	14:00	Methods	Cytomorphology
14:00	14:45	Practical	Microscopy of bone marrow and blood smears
Break			
15:00	16:00	MLL insights	Initial analyses and diagnostic workflow

Tuesday, 26 th of April 2022			
08:00	08:45	Clinical	MBL& CLL
08:45	09:30	Clinical	Lymphomas
Break			
10:00	10:45	Methods	Artificial intelligence
10:45	11:30	Practical	Artificial intelligence
11:30	12:15	Methods	Immunophenotyping
Lunch Break			
13:15	15:15	Practical	Immunophenotyping: data analysis
Break			
15:30	16:15	MLL insights	Lab-IT and automation at MLL

Wednesday, 27 th of April 2022			
08:00	08:45	Clinical	MDS
08:45	09:30	Clinical	AML
Break			
10:00	11:15	Methods	Chromosome analysis
11:15	12:00	Practical	Karyotyping
Lunch Break			
13:00	13:45	Methods	FISH
13:45	14:30	Practical	FISH analysis and reporting
Break			
14:45	15:30	MLL insights	Discussion: unclear initial diagnosis



Thursday, 28th of April 2022			
08:00	08:45	Clinical	MPN, CHIP
08:45	09:30	Clinical	CML
Break			
10:00	10:45	Methods	PCR
10:45	11:15	Practical	PCR: data analysis
11:15	12:30	Methods	Sequencing: method and reporting
Lunch Break			
13:30	14:30	Methods	Bioinformatics
14:30	15:15	MLL insights	Variant interpretation demo: "hands on"
Break			
15:30	16:15	MLL insights	IVDR and its challenges

Friday, 29th of April 2022			
08:00	08:45	Clinical	ALL
08:45	09:30	Clinical	MGUS, SMM and Multiple Myeloma
Break			
10:00	11:30	Practical	Integrated diagnostics
Lunch Break			
12:30	13:30	Methods	WGS
13:30	14:30	Practical	WGS: cases
Break			
14:45	15:15	MLL insights	Discussion: future of hematological diagnostics
15:15	15:45	Evaluation	Feedback round