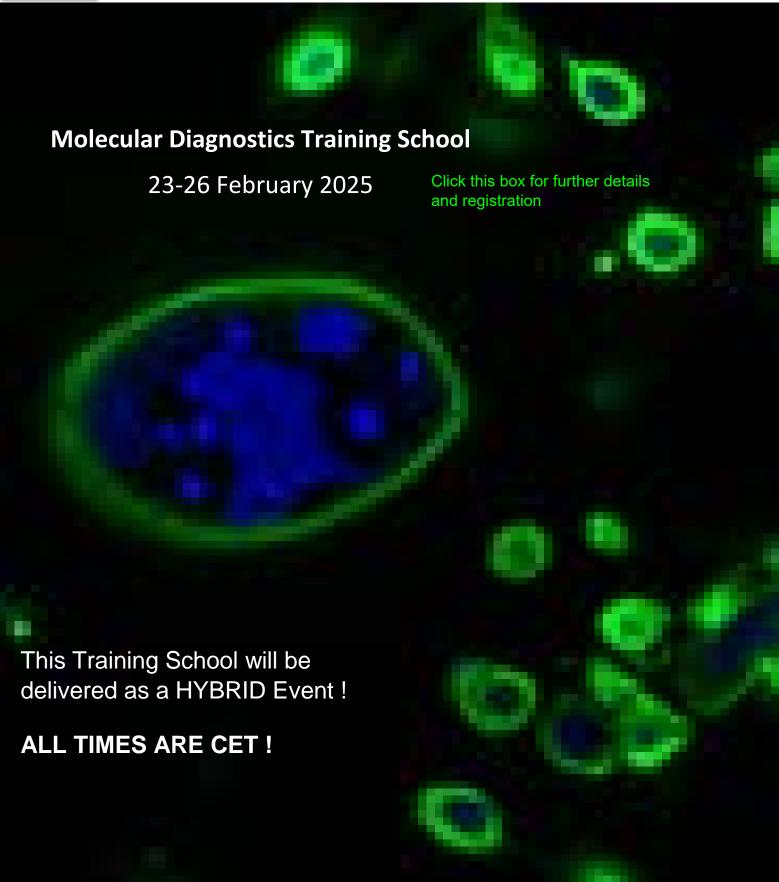


The MU Vienna Department of Pathology &

The Nottingham Molecular Pathology Node













From Prof. Renate Kain

Dear Delegates,

I would like to welcome you all to the seventh **Molecular Diagnostics Training School,** to be held as a hybrid event. The school is supported by the **Austrian Society of Pathology**, the **Nottingham Molecular Pathology Node.**

Established in co-operation with the University of Nottingham, the Molecular Diagnostics Training School has developed into a highly successful joint venture. As last year, we are covering the basics of molecular diagnostics, digital pathology and image analysis in **pre-recorded lectures** that provide the foundation for those of you who have little or no experience in either biological background or technical/methodological approaches. These pre-recorded lectures will be available to you before the beginning of the Training School and are the basis for the specialized lectures on recent developments in technological approaches as well as worked examples.



As for the **Molecular Diagnostics Training School** (MDTS) I would like to begin with the following statement: *Molecular Diagnostics is the foundation for precision medicine.*

The MDTS is aimed at persons who may have little experience with molecular diagnostics but also those who are looking for a refresher course or want updates on novel developments. The training school will introduce you to common concepts which underpin the tests, including the panoply of tests which are currently used in diagnostic practice. We will also discuss the importance of getting good template and of having robust quality assurance for your tests. The school will also cover new methodologies such as digital spatial profiling and it will conclude with an overview of current applied molecular diagnostics in a variety of different organ systems.

We have a world class faculty to deliver the teaching materials and to deal with any questions.

I hope you enjoy and benefit from the training school. We will not make you into a card-carrying molecular biologist in these three days, but if you come away agreeing with my introductory statement, then the school will have achieved its aims!

Best wishes,

Renak Kain

Renate Kain

Professor of Pathology Medical University of Vienna











Sunday, 23 February 2025 Pre-Conference Tutorials (Optional)

ONLINE ONLY

	Tutorials for the Molecular Diagnostic Training School (optional)			
Re	Registered attendees can watch the tutorials below via the links emailed to them.			
	The Basic Principles of PCR			
	Prof. Mohammad <u>Ilyas</u> - University of Nottingham, UK			
	Basics of FISH			
	Prof Ana-Iris <u>Schiefer</u> - Medical University of Vienna, Austria			
	Human Genome Variation Society (HGVS) Variant Nomenclature			
	Prof Leonhard <u>Müllauer</u> - Medical University of Vienna, Austria			
	The Basics of Genomics and Transcriptomics			
	Prof Martin <u>Bilban</u> - Medical University of Vienna, Austria			
	Quality Control in NGS			
	Dr Antonios <u>Koussounadis</u> - Saphetor SA			
	Integrative Genome Viewer			
	Dr Raheleh Sheibani Tezerji - Medical University of Vienna, Austria			









Day 1 – Monday, 24 February 2025 Basics of Technologies

Morning Session Chair: Prof. M. Ilyas

	Morning Session Chair: Prof. M. Ilyas
08:25	Introduction - Welcome
08:30	Real-Time PCR and Data Interpretation Prof. Mohammad <u>Ilyas</u> – University of Nottingham, UK
10:00	Comfort break
10:30	The Highs / Lows and Data Interpretation of Sequencing Dr Susan Richman – St James University Hospital, Leeds, UK / Dr Antonios Koussounadis - Saphetor SA
12:00	The Liquid Biopsy Prim. Prof. Karl <u>Sotlar</u> – University Hospital Salzburg, Austria
12:30	Next Generation Sequencing – Worked Examples Part 1 Prof Martin Bilban - Medical University of Vienna
13:00	Lunch break
	Afternoon Session Chair: Prof. L. Müllauer
14:00	Chromogenic In-Situ Hybridisation Prof. Elizabeth Soilleux - Dept of Pathology, University of Cambridge, UK
14:30	The Molecular Tumour Board Prof Leonhard <u>Müllauer</u> – Medical University of Vienna, Austria
15:00	Next Generation Sequencing – Worked Examples Part 2 Dr Sophia Petschnak - Klinik Favoriten, Vienna
15:30	Comfort break
16:00	NEQAS – Ensuring Standards in Molecular Diagnostics Dr Jenni <u>Fairley</u> – UK NEQAS, UK
16:30	NGS – Principles & Platforms PD Dr Gregor <u>Hörmann</u> - MLL Munich Leukemia Laboratory, Germany
17:30	Wrap-up Day 1 of MDTS











Day 2 – Tuesday, 25 February 2025 Worked Examples I

Morning Session Chair: Prof. R. Kain

	Worlding Session Chair. Proj. N. Kulli
08:45	Homologous Repair Deficiency Prof Leonhard <u>Müllauer</u> , Prof Christoph <u>Grimm</u> - Medical University of Vienna, Austria
09:15	Hereditary Tumour Syndrome Prof Katharina Wimmer - Medical University of Innsbruck, Austria
10:00	Comfort break
10:30	Molecular Diagnostics and Immuno-Oncology Dr Alexander <u>Haragan</u> - Royal Liverpool University Hospital, UK
11:15	Molecular Diagnostics in Mesothelioma Dr Luka Brcic - Medical University of Graz, Austria
11:45	Molecular Diagnostics in Soft Tissue Tumours Dr Suk Wai <u>Lam</u> - Leiden University Medical Center, The Netherlands
12:15	Molecular Diagnostics in Lung Cancer Prof Leonhard <u>Müllauer</u> - Medical University of Vienna, Austria
12:45	Lunch break
	Afternoon Session Chair: Prof. AI Schiefer
13:45	Molecular Diagnostics in Melanoma Prof Ana-Iris <u>Schiefer</u> - Medical University of Vienna, Austria
14:15	Molecular Diagnostics in Male Genitourinary Cancers Prof Clare Verrill - University of Oxford, UK
15:00	Molecular Diagnostics in Prostate Cancer Prof Jyotsna <u>Batra</u> , Queensland University of Technology, Australia
15:45	Comfort break
16:15	Molecular Diagnostics in Gynaecological Cancers / Worked Examples Prim. Prof. Sigurd <u>Lax</u> - Medical University of Graz, Austria
17:00	Wrap-up Day 2 of MDTS











Society



Day 3 – Wednesday, 26 February 2025 Worked Examples II

	Morning Session Chair: Prof. Zs. Bago-Horvath
08:30	Programmed Cells – Machine Learning for Molecular Medicine Prof Christoph Bock - CeMM Research Center for Molecular Medicine of the Austrian Academy
09:30	Molecular Diagnostics in CNS Cancers Dr Zane Jaunmuktane - UCL Queen Square Institute of Neurology, UK
10:15	Comfort break
10:45	Molecular Diagnostics in Lymphoid Cancers Prof Ming <u>Du</u> - University of Cambridge, UK
11:30	Scientific Databases and Software in Diagnostic Molecular Pathology Dr André Oszwald - Medical University of Vienna, Austria
12:15	Rubbish in=Rubbish out: The Importance of Template Dr Abhik Mukherjee - University of Nottingham, UK
12:45	Lunch break
	Afternoon Session Chair: Prof. R. Kain
13:45	Molecular Diagnostics in Breast Cancers Prof Emad Rakha - University of Nottingham, UK
14:30	Prognostic and Predictive Molecular Tests for Breast Cancer Prof Zsuzsanna Bago-Horvath - Medical University of Vienna, Austria
15:15	Molecular Diagnostics in Gastrointestinal Cancers Prof Gerald Höfler - Medical University of Graz, Austria
16:00	Comfort break
16:30	Pharmacogenomics Prof Henk Jan <u>Guchelaar</u> - Leiden University Medical Center, The Netherlands
17:15	Homologous Recombination Deficiency, a Novel Biomarker in Cancer PD Dr Theo Kraus - University Hospital Salzburg, Austria

18:00



Wrap-up Day 3 and Close of MDTS





