



The MU Vienna Department of Pathology  
&  
The Nottingham Molecular Pathology Node

## Molecular Diagnostics Training School

23-26 February 2025

This Training School will be  
delivered as a HYBRID Event!

**ALL TIMES ARE CET !**

DEPARTMENT OF PATHOLOGY



Vienna Healthcare Group  
University Hospital Vienna



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# Foreword

## Molecular Diagnostics Training School 2025

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** and 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,

*Renate Kain*

**Renate Kain**

Professor of Pathology  
Medical University of Vienna



# Molecular Diagnostics Training School 2025

Sunday, 23 February 2025

Pre-Conference Tutorials (Optional)

ONLINE ONLY

## Tutorials for the Molecular Diagnostic Training School (optional)

Registered attendees can watch the tutorials below via the links emailed to them.

### The Basic Principles of PCR

Prof. Mohammad [Ilyas](#) - University of Nottingham, UK

### Basics of FISH

Prof Ana-Iris [Schiefer](#) - Medical University of Vienna, Austria

### Human Genome Variation Society (HGVS) Variant Nomenclature

Prof Leonhard [Müllauer](#) - Medical University of Vienna, Austria

### The Basics of Genomics and Transcriptomics

Prof Martin [Bilban](#) - Medical University of Vienna, Austria

### Quality Control in NGS

Dr Antonios [Koussounadis](#) - Saphetor SA

### Integrative Genome Viewer

Dr Raheleh [Sheibani Tezerji](#) - Medical University of Vienna, Austria

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# Molecular Diagnostics Training School 2025

Day 1 – Monday, 24 February 2025

Basics of Technologies

Morning Session Chair: *Prof. M. Ilyas*

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

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# Molecular Diagnostics Training School 2025

Day 2 – Tuesday, 25 February 2025

Worked Examples I

Morning Session Chair: *Prof. R. Kain*

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

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# Molecular Diagnostics Training School 2025

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 [Du](#) - 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 [Guchelaar](#) - 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

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