

**KONSILIARLABORATORIUM FÜR ELEKTRONENMIKROSKOPISCHE ERREGERDIAGNOSTIK
CONSULTANT LAB FOR DIAGNOSTIC ELECTRON MICROSCOPY IN INFECTIOUS DISEASES**

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**Invitation to the
17th BASIC LAB COURSE IN DIAGNOSTIC EM OF INFECTIOUS DISEASES
March 25-26, 2010, Robert Koch Institute, Berlin, Germany**

Dear Colleagues,

The consultant laboratory for diagnostic EM is offering “Basic Lab Courses” at the Robert Koch Institute in Berlin, Germany. The next (17th) course is scheduled for March 25-26, 2010. Below you can find the main topics to be dealt with during the seminars and the wet lab workshop. The course is free of charge for members of the DGE (Deutsche Gesellschaft für Elektronenmikroskopie) and RKI. Non-members are requested to contribute 50 Euro to partially cover the costs.

Main Topics

Theory

Introduction: Principles of Diagnostic EM and historical aspects.

The role of diagnostic EM in infectious diseases.

Pros and Cons of diagnostic EM compared to other lab techniques.

Basic methods in EM diagnostics:

Preparation of hydrophilic and stable EM-grids

Negative staining versus thin section EM.

Discussion of the effects of different contrast “stains”.

Particle enrichment in diagnostic samples (Airfuge, immuno-EM).

Evaluation at the EM, assessment and documentation of findings.

Quantitation in diagnostic EM: measuring and counting / Lab safety in diagnostic EM.

Practical work

- Preparation of suitable, i.e. hydrophilic EM-grids:
 - selection of proper grid quality
 - cleaning of 400 mesh copper-grids
 - application of glow-discharge, UV, Bacitracin, Alcian blue etc.
- Negative staining and “direct” EM of viruses and bacteria using different “stains”.
- EM preparation from diagnostic suspensions.
- Particle enrichment from diagnostic samples by Airfuge centrifugation.

For further information and registration, please send an Email to MoellerL@rki.de.

We hope to see you in April in Berlin.

Kind regards,

Norbert Bannert and Lars Möller

