

HOPITAL NORD  
Téléphone 04.77.12.05.12  
Télécopie 04.77.12.05.52  
Professeur S. PAUL  
Docteur C. LAMBERT  
Docteur AE BERGER

The first course on basic cytometry was organized in **Al-Zahraa University Hospital**, hematology department in Cairo on the 27-28<sup>th</sup> of November 2019.

The course was organized by **dr Reham HAMMAD**, hematologist, assistant professor at **Al-Zahraa University Hospital Cairo**.

The course was organized under the umbrella of **Prof. Dr. Tarek Salman**, Vice President of Al-Azhar University for Post-Graduate Studies and Research., **Prof. Dr. Nayera Moftah**, *Dean Faculty of Medicine (Girls), Al-Azhar University* and the **International Federation of Clinical Chemistry and Laboratory medicine (IFCC)**

The course aimed to introduce the principles of cell analysis by flow cytometry mainly for hematologic diagnosis.



The course was limited to 24 participants for pedagogic reasons. The participants. were Professors, Assistant Professor or biologists in hospitals, coming from different university hospitals in Egypt. Most of the participants knew little but had access to a cytometer, mainly Calibur™, Canto™, Navios™ or Cytoflex™ instruments. All had a good knowledge on hematology, leukemia and lymphoproliferative disorder classification and clinical significance.

The course included 12 hours of lectures and 4 hours of practicals

Lectures were performed by experienced teachers :

- Dr Claude Lambert (Immunologist, Saint-Etienne university hospital, IFCC)
- Dr Reham Hammad (Hematologist in Al-Azhar university)
- Dr Eman Kandil (Hematologist in National Cancer Institute)
- Dr Mahmoud Hammad (Pediatician oncologist in National Cancer Institute)

- Dr Mona Alrayes (Al-Azhar) kindly volunteer to give a lecture but sadly could not for family major reasons.

And addressed:

- Basics of flow cytometry, physics, fluidic, fluorescence, instrument settings, compensations.
- Sample preparation
- Data analysis, positive/ negative, gating strategies, statistics, reporting
- Basics for immunological analysis including T cells, B cells and dendritic cells.
- Basics for leukemia phenotyping and interpretation
- Basics for lymphoproliferative disorders phenotyping and interpretation

Course paper approvals was coordinated by Dr. Ahmed Elshafei, Lecturer, Faculty of Pharmacy (Boys), Al-Azhar University.

For reasons of space limitation, only 15 participants were selected to attend the practicals; each one made one T, B, NK immune-labelling on whole blood, lysis wash and analyzed their own sample on the cytometer from the Al-Azhar university.

The course was performed in a very intense, high quality level. Participants were highly attentive to the courses and a lot of interactions and discussions came from the audience. Courses slides and few documents were distributed in electronic pdf format at the end of the course. A certificate of attendance was delivered at the end of the course.

Satisfactory questionnaire was distributed at the end of the course and was collected anonymously. Quote were almost unanimously appreciated as excellent or very good. Only the course high density in a short period of time was the general complain. More practical work was also frequently asked by participants.

The course costs were limited to a minimum. All course expenses (breaks, lunch, certificates, and documents) were covered by the registration fees that were adapted to the local possibilities.

Most participants had no financial support for participating to the course.

Expenses were managed by the Al-Azhar university. The course and practicals were possible thanks to Al-Azhar university hospital for the lecture room and the laboratory / Instrument availability.

Mr. Ibrahim Ali the flow cytometry lab technician helped very actively for the organization, the practicals and the sample analysis on the cytometer.

Mr Mohammad Fawzy helped a lot for the logistic.

The two main flowcytometry distributors were informed on the course and made a visit to the course but did not financially contributed.

Dr Claude LAMBERT IFCC Flow cytometry Working Group coordinator

Handwritten signature of Claude Lambert in black ink.

**CHU Hôpitaux de ST-ETIENNE**  
HOPITAL NORD  
Laboratoire d'Immunologie  
*Docteur C. LAMBERT*  
42055 ST-ETIENNE Cédex 2