MUNI
MED

BLOOD

Slide:

Peripheral blood smear, panoptic staining (method of Pappenheim), immersion oil, magnif. 1000x

How to study the blood smear in LM?

- please, do not manipulate the microscope

- they are prepared for your study of blood smears after presentation

- lens of immersion objective (magnifying 100x) is immersed into drop of immersion oil and blood smear is prepared for study

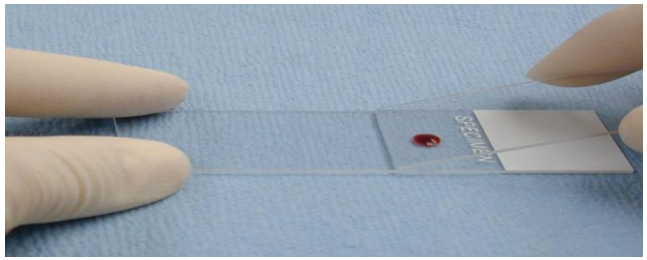
- swich on the microscope and check the image in the microscope

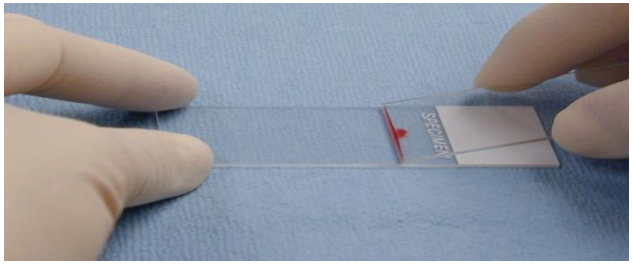
- if the image is not sharp, focus it using only the microscrew**!** If it is not possible, contact your teacher.

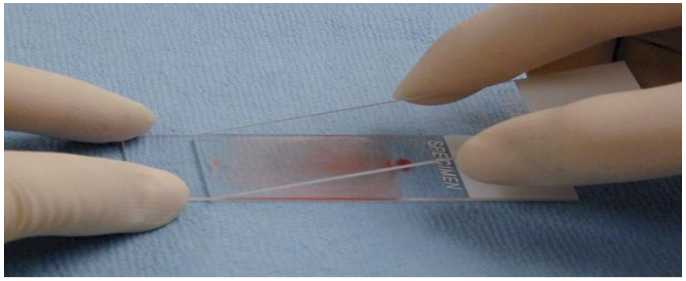
- look for all types of WBCs (just move the table), draw and label them into the protocols compared to RBC, draw and label blood platelets

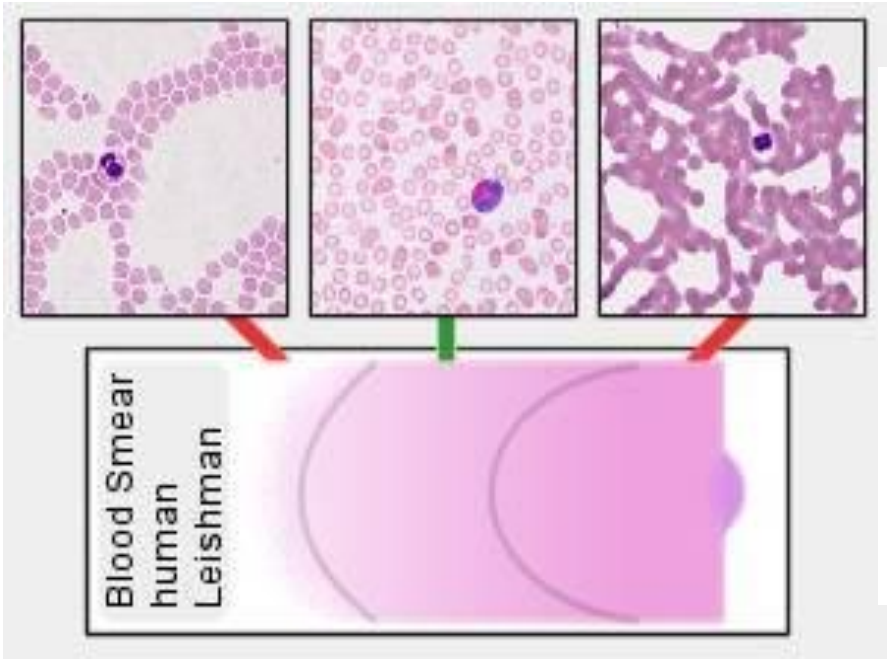
- examination of DWCC (after break)

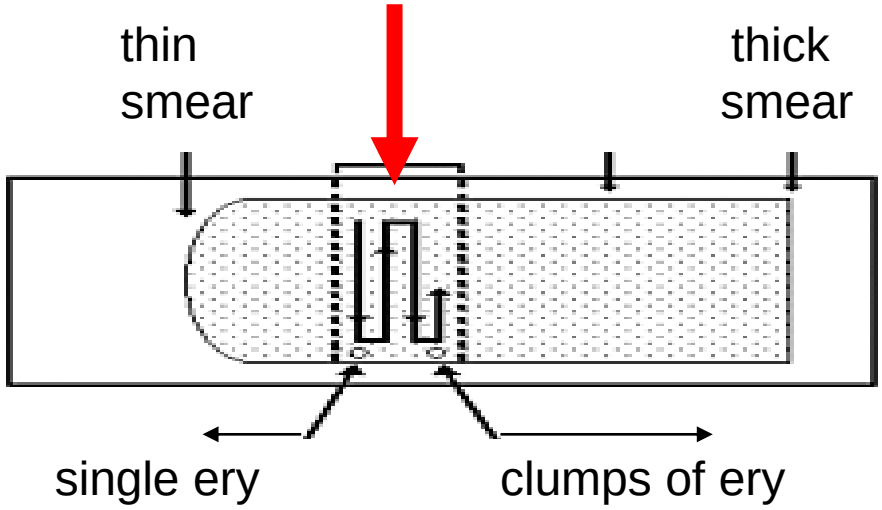
Blood smear - processing







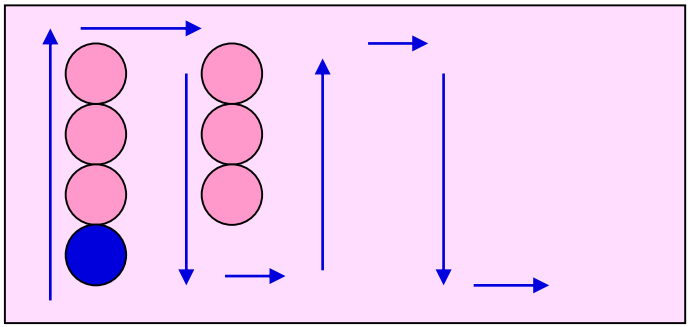




MED

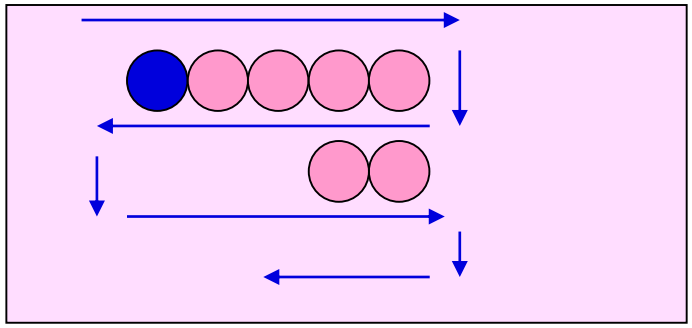
How to „count“ leukocytes in blood smear?

The blood smear have to be systematicaly viewed (it avoids repeatedly „count“ the same cells).

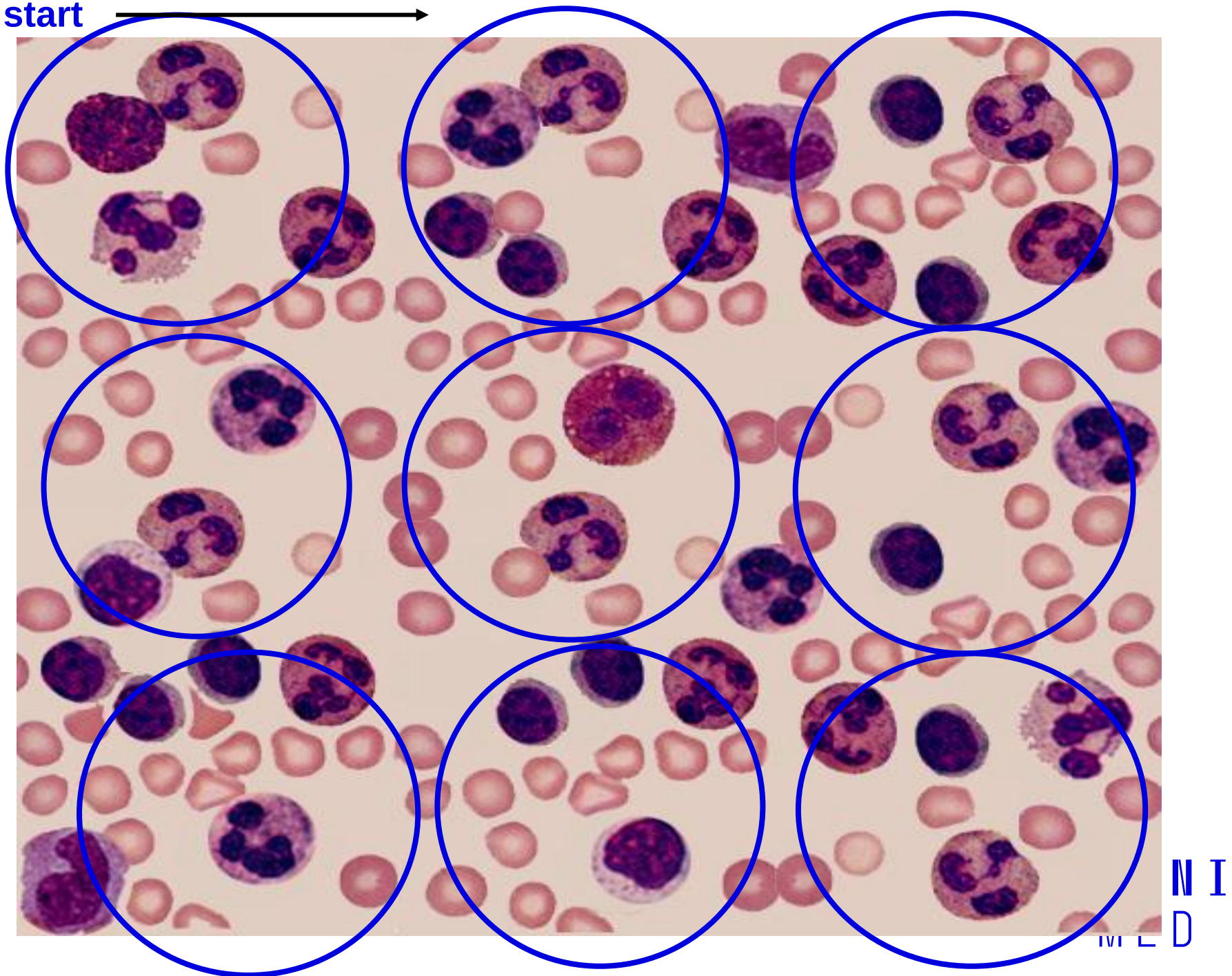


vertical browsing

or



horizontal browsing


start

Differential white cell count (DWCC) - table

	1	2	9	10	results	norm
Neu band	/		//			* 4 %
Neu segment	///// //	///	///// /	///		*67 %
Eos		/	/	//		3 %
Baso				/		1 %
Ly	//	////	/	/////		20 %
Mono		//				5 %
	10	10	10	10	100	100 %

* **bands : segments** - 4 % : 68 % (1 : 17)
shift to the left
shift to the right

Anomalies of DWCC

	↑	↓
Neutrophils	neutrophilic granulocytosis	neutrophilic granulocytopenia
Eosinophils	eosinophilic granulocytosis	eosinophilic granulocytopenia
Basophils	basophilic granulocytosis	basophilic granulocytopenia
Lymphocytes	lymphocytosis	lymphocytopenia
Monocytes	monocytosis	monocytopenia