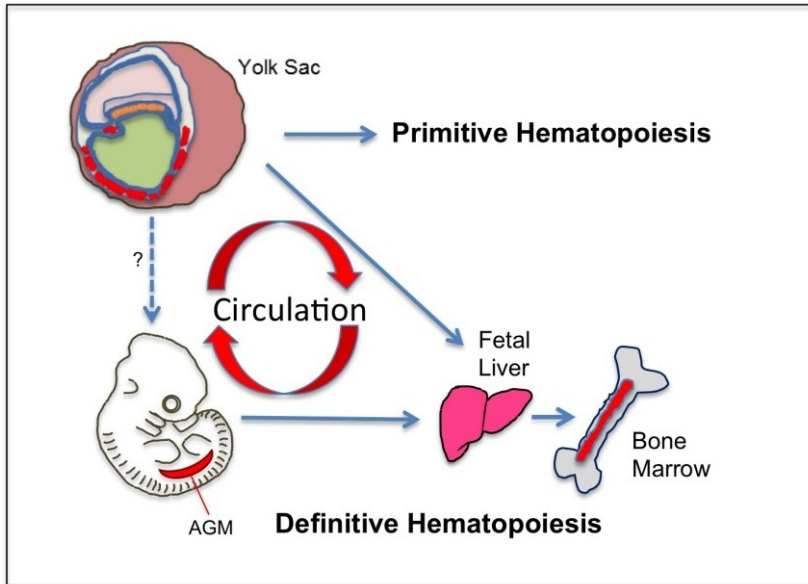


Metody studia hematopoézy

Speciální metody fyziologie živočichů

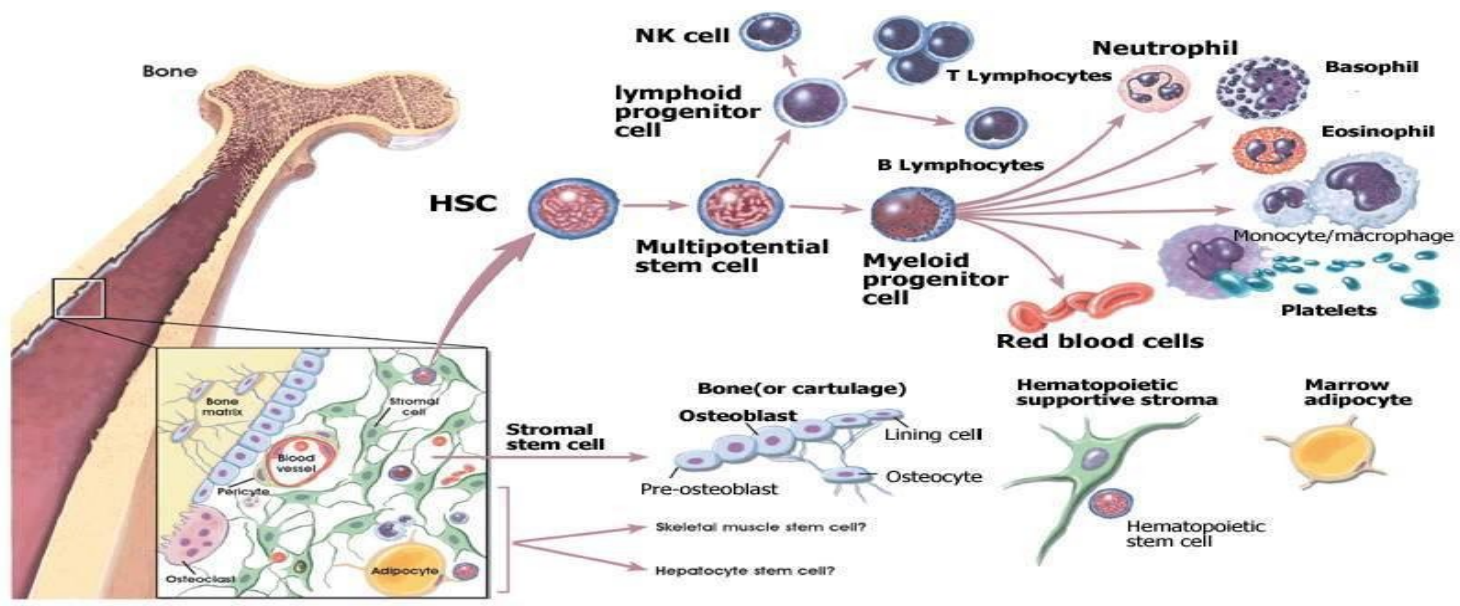
Mgr. Markéta Hanáčková

Vedoucí: Mgr. Jiří Pacherník, Ph.D.

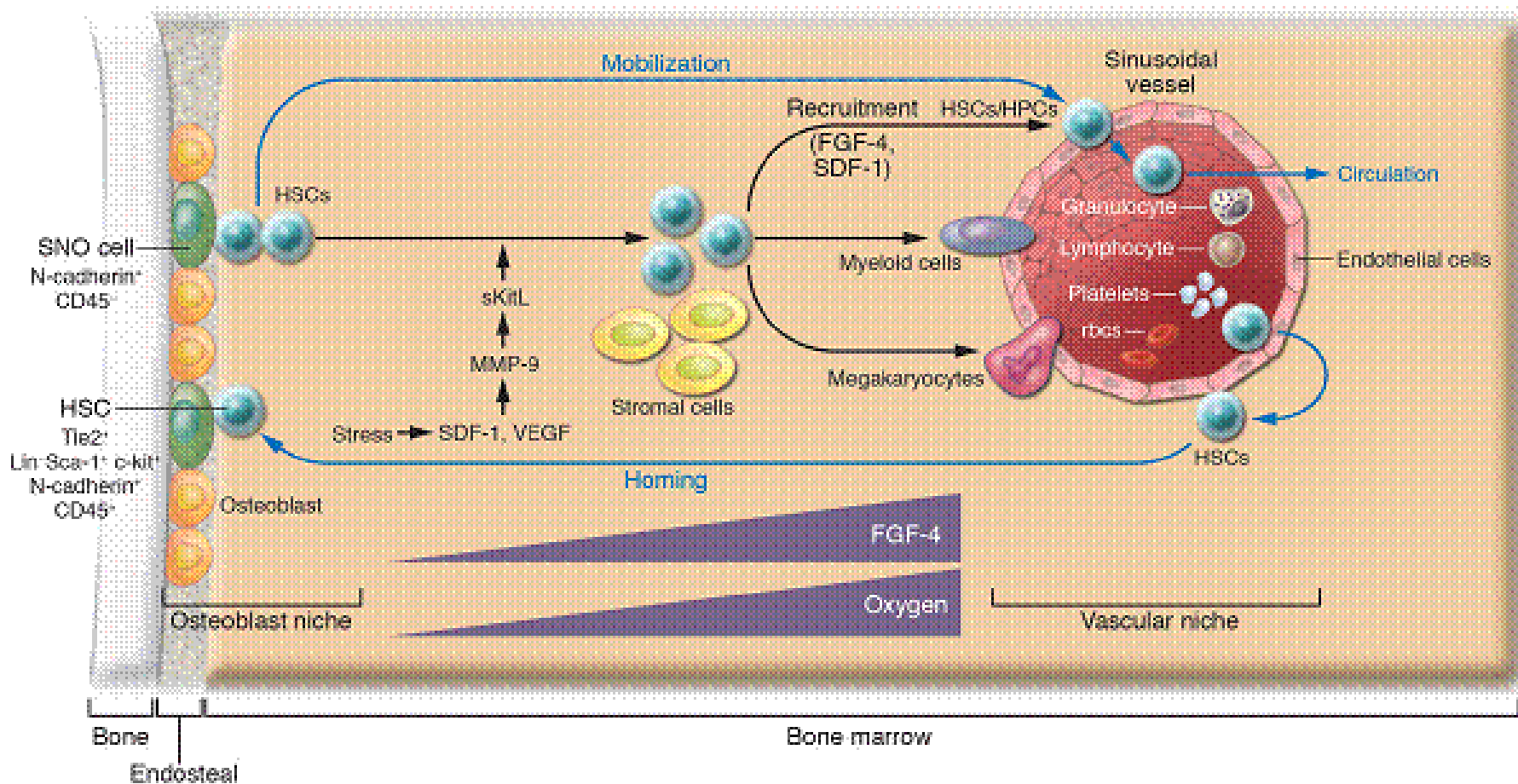


Hematopoéza

HSC – self-renewal, diferenciace, obnova hematopoézy



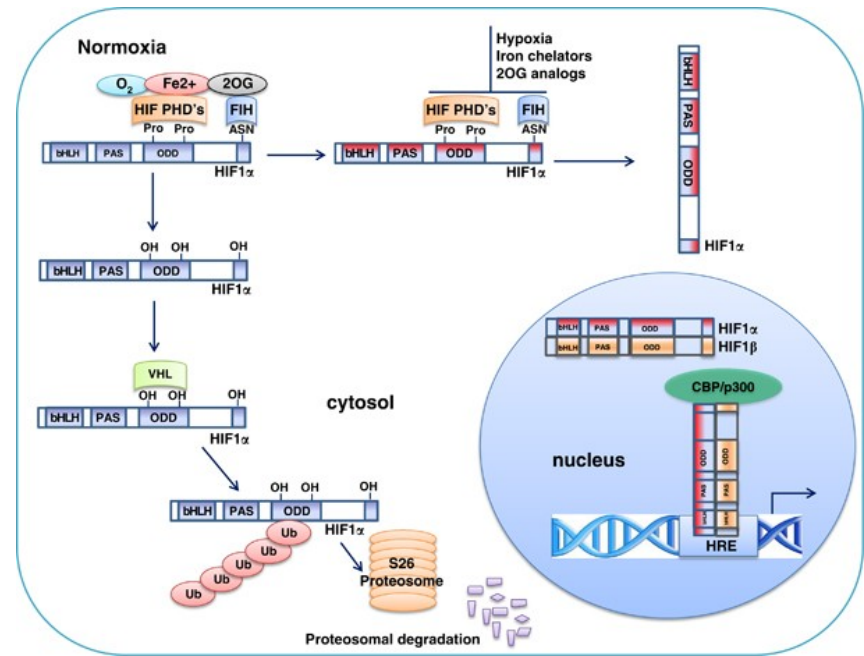
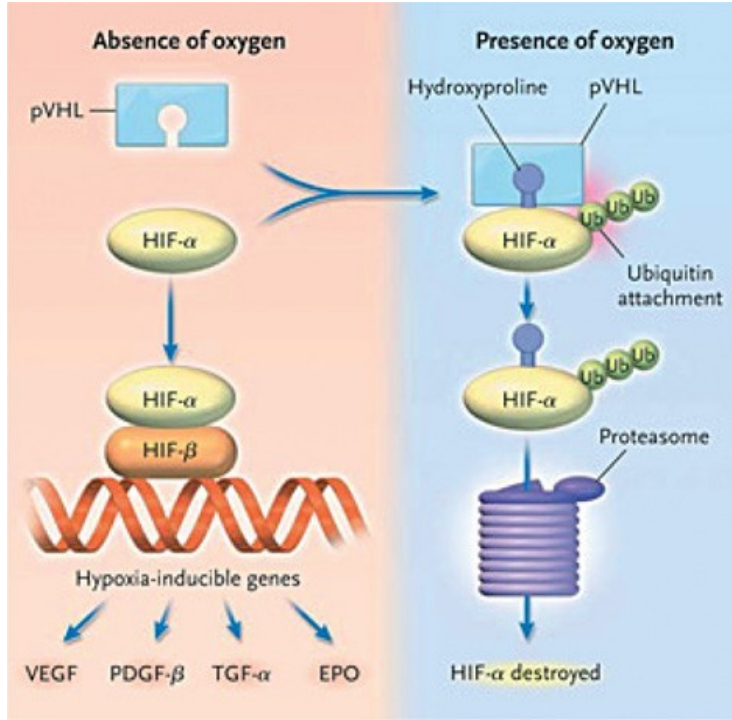
Hematopoietické niche



Hypoxie vs. Hypoxii imitující látky

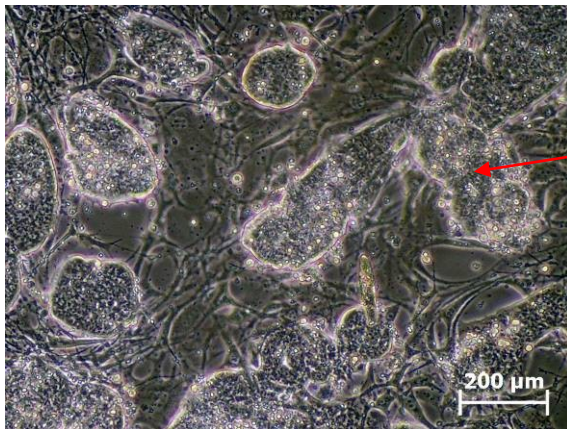
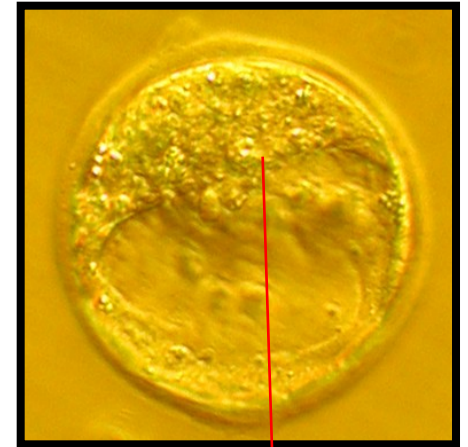
- Hypoxie
 - 1% kyslíku
 - 5% kyslíku

- Hypoxii imitující látky
 - Zasahují do metabolismu HIF1 α
 - Chelátory Fe – př. DFO
 - Analog 2-OG – př. DMOG
 - Další příklady CoCl₂, JNJ



Hematopoetická diferenciacie mESC

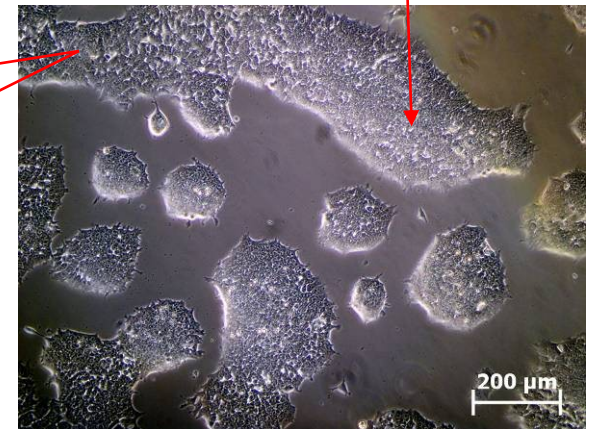
- ESC z myší blastocysty
 - mESC R1
 - mESC HIF1 α -/-
- Hematopoetická diferenciacie



Kokultivace ESC s OP9

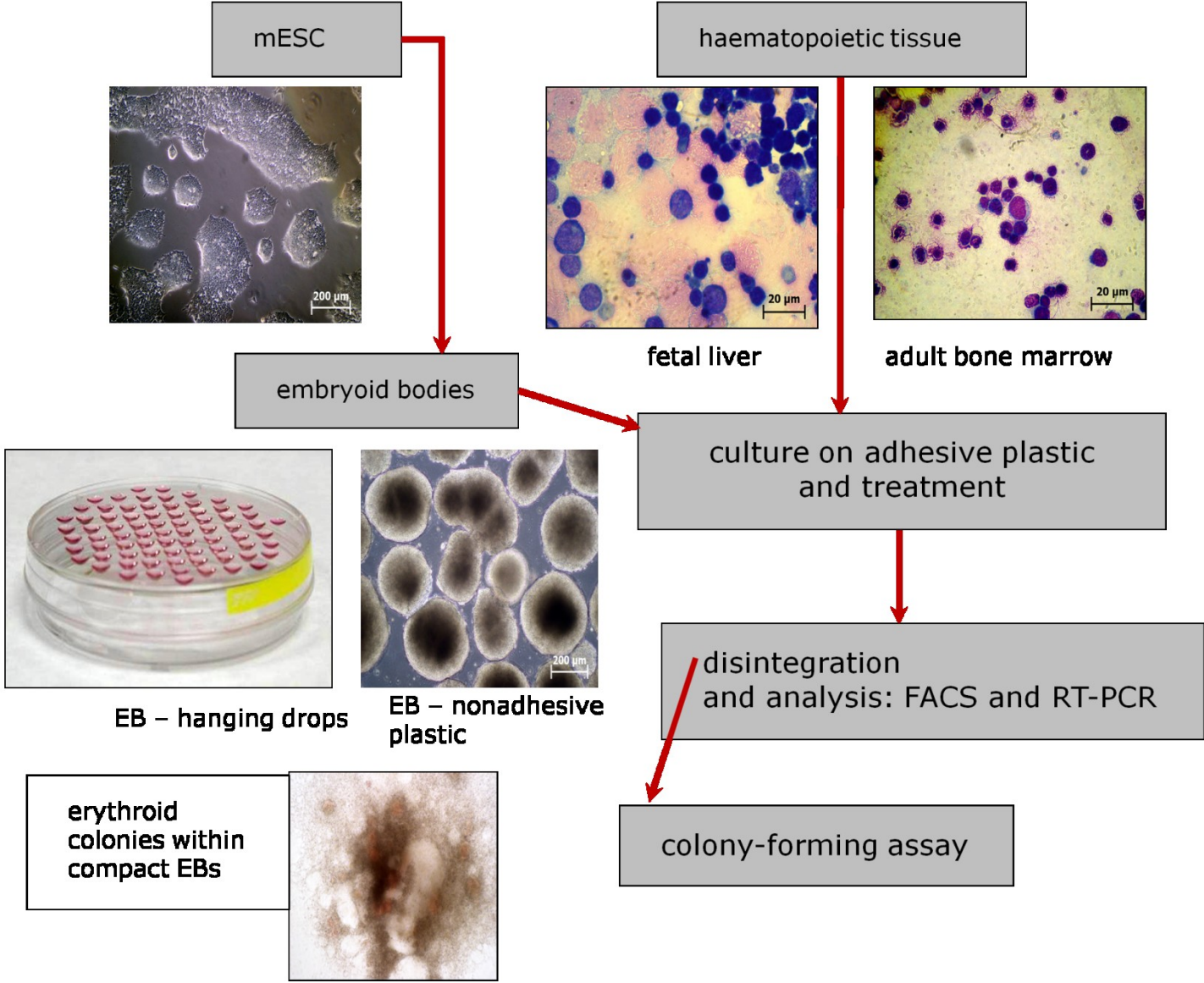


Embryoidní tělíška



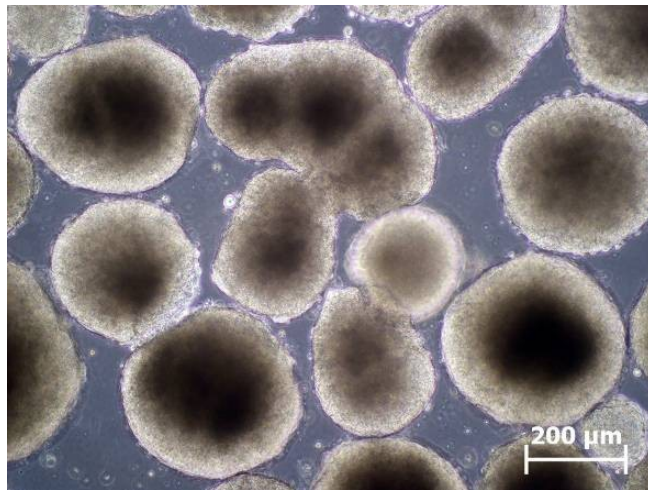
Embryonální kmenové buňky

Schema of haematopoietic differentiation



Hematopoetická diferenciace v EB

- Neadhezivní plastik
 - Větší množství tělísek
 - Rozdílná velikost EB

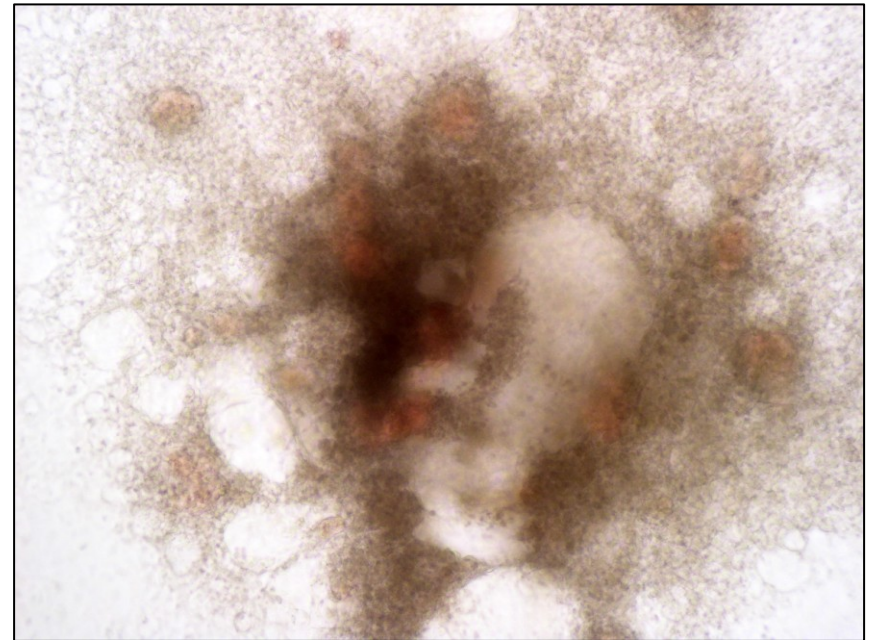
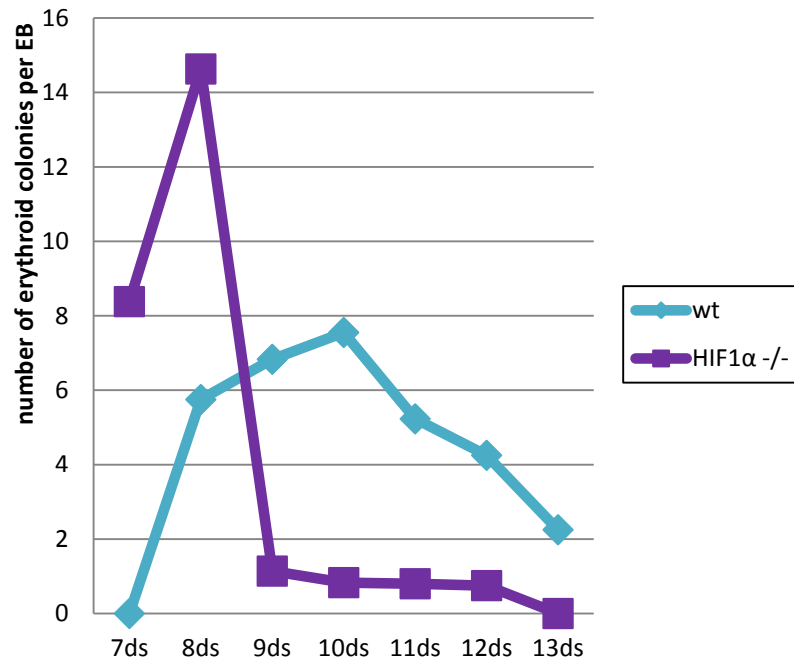


- Visící kapky
 - Omezené množství EB
 - Stejná velikost EB díky stejnému počtu vysetých buněk

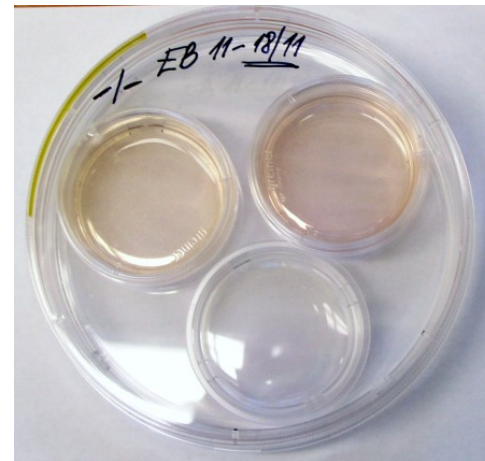
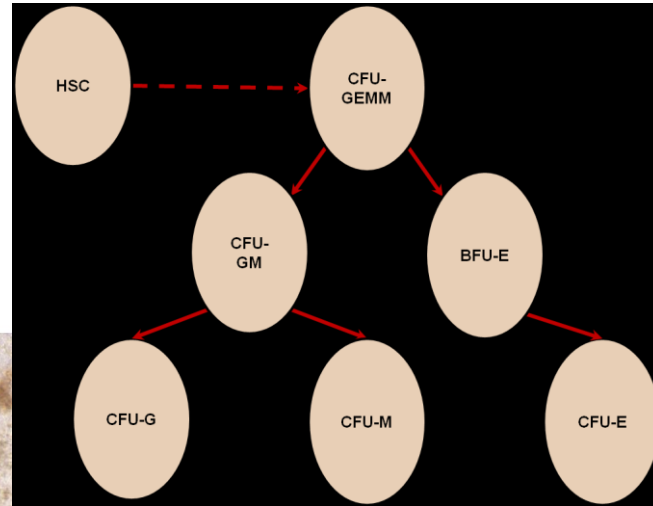
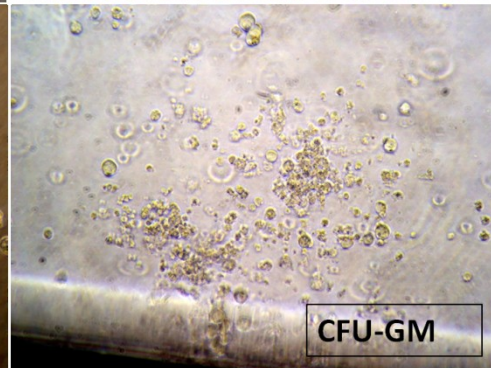
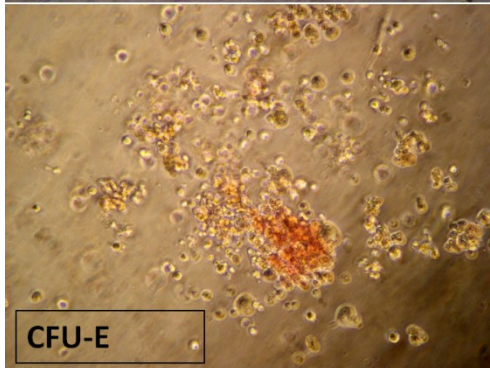
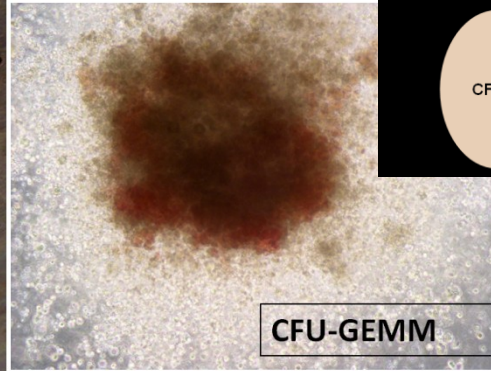
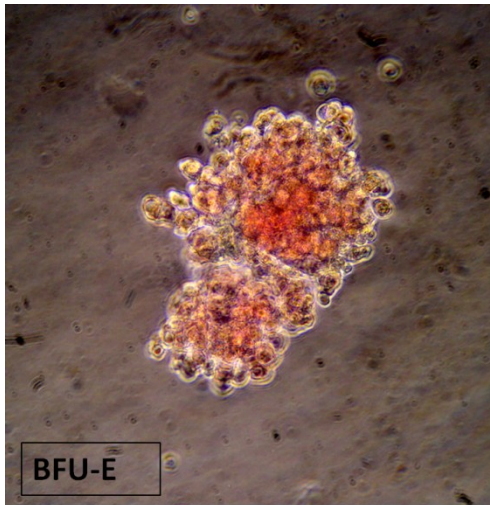


Hodnocení erythropoézy

evaluation of erythropoiesis
within adherent compact EB
differentiating 5ds in hanging
drops



Colony forming assay



Děkuji za pozornost

