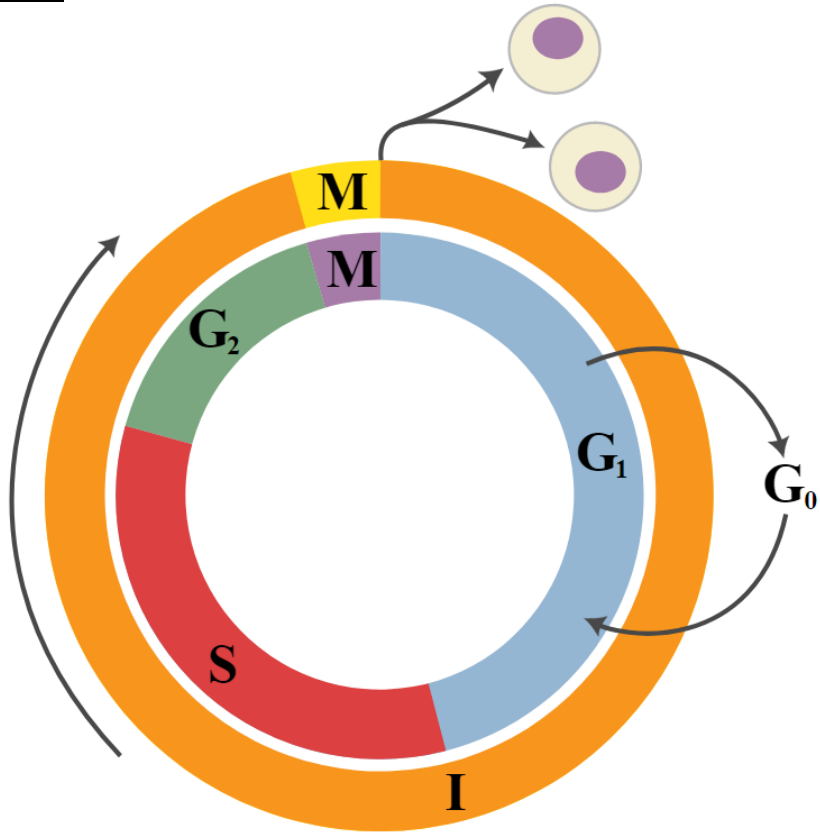


Gametogeneze

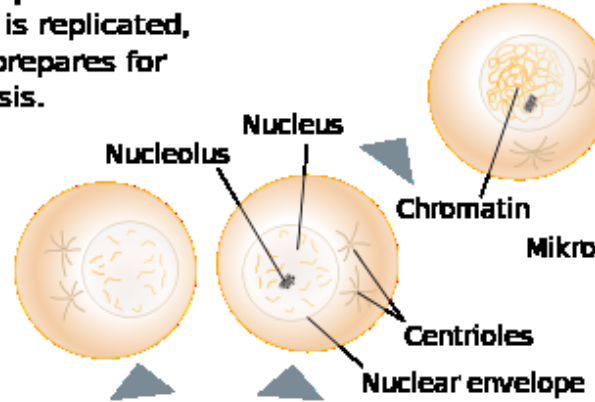
E-learning support material

Buněčný cyklus a mitóza

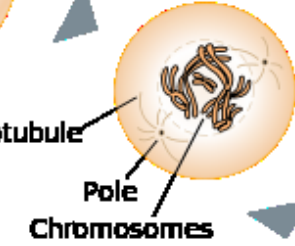


https://en.wikipedia.org/wiki/Cell_cycle#/media/File:Cell_Cycle_2-2.svg

Interphase
DNA is replicated,
cell prepares for
mitosis.



Prophase
Chromatin condenses making
the chromosomes visible.



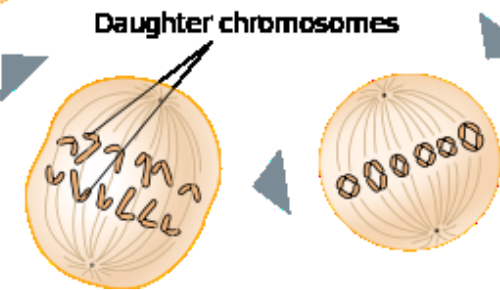
Prometaphase
Nuclear envelope
breaks down.



Telophase
Daughter
chromosomes
reach the poles
and form two
new nuclei.



Anaphase
Sister chromatids
separate and the
resultant daughter
chromosomes move
toward the poles.



Metaphase
The chromosomes
become aligned at
the equatorial
plane.

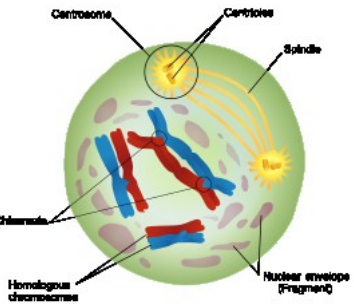


https://commons.wikimedia.org/wiki/File:Mitosis_schematic_diagram-en.svg

Meiόza

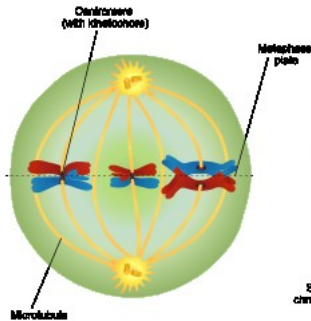


Prophase I



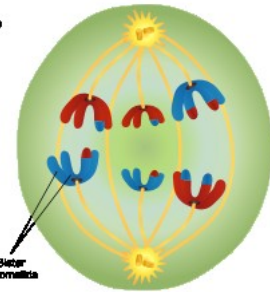
The chromosomes condense, and the nuclear envelope breaks down. Crossing-over occurs.

Metaphase I



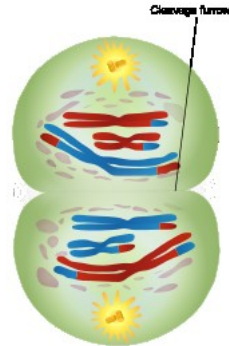
Pairs of homologous chromosomes move to the equator of the cell.

Anaphase I



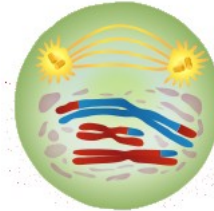
Homologous chromosomes move to the opposite poles of the cell.

Telophase I & cytokinesis

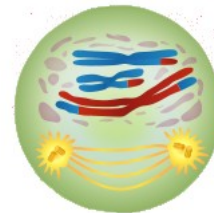


Chromosomes gather at the poles of the cells. The cytoplasm divides.

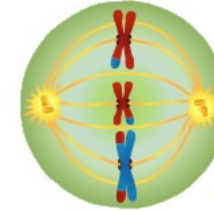
Prophase II



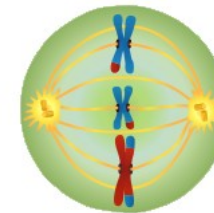
A new spindle forms around the chromosomes.



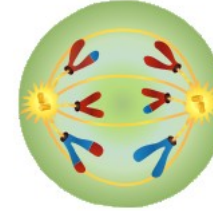
Metaphase II



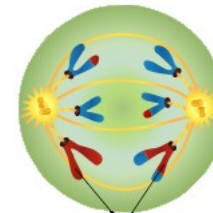
Metaphase II chromosomes line up at the equator.



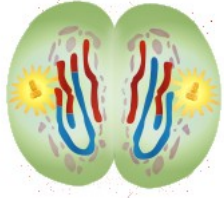
Anaphase II



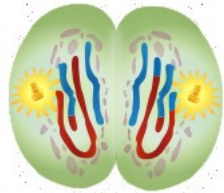
Centromeres divide. Chromatids move to the opposite poles of the cells.



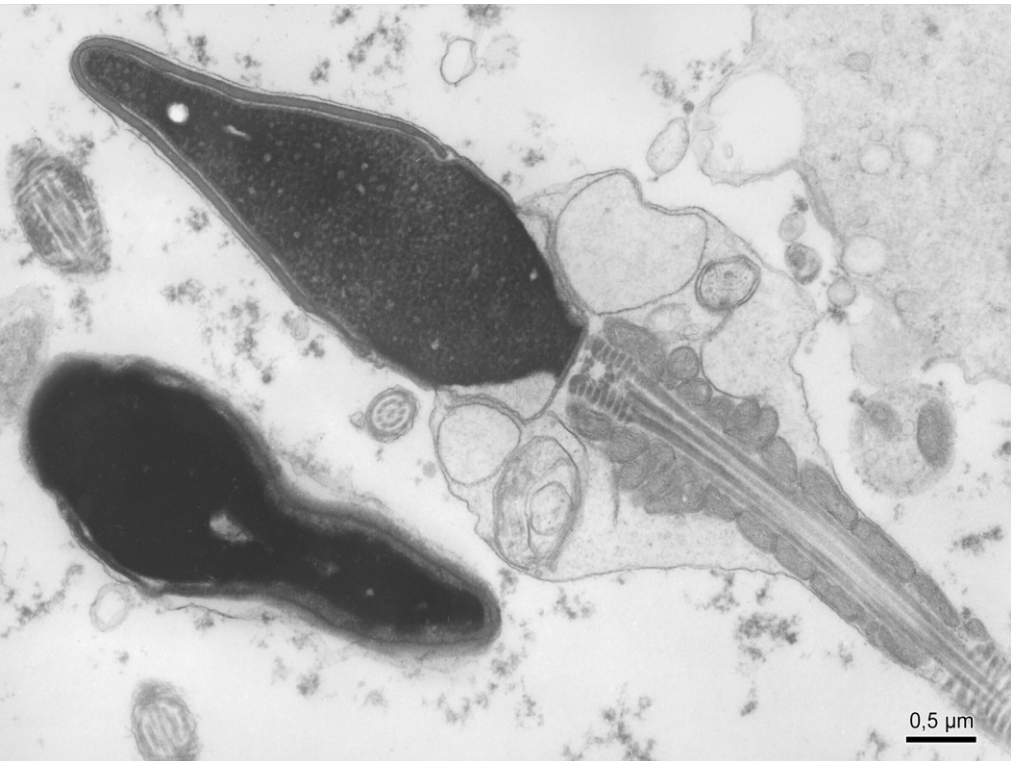
Telophase II & cytokinesis



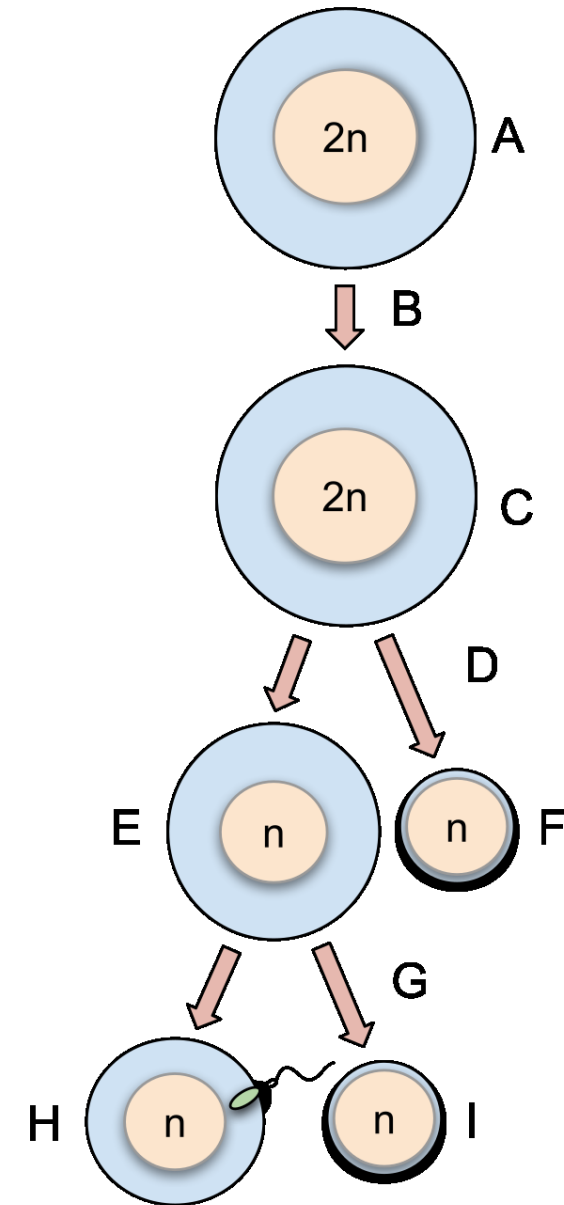
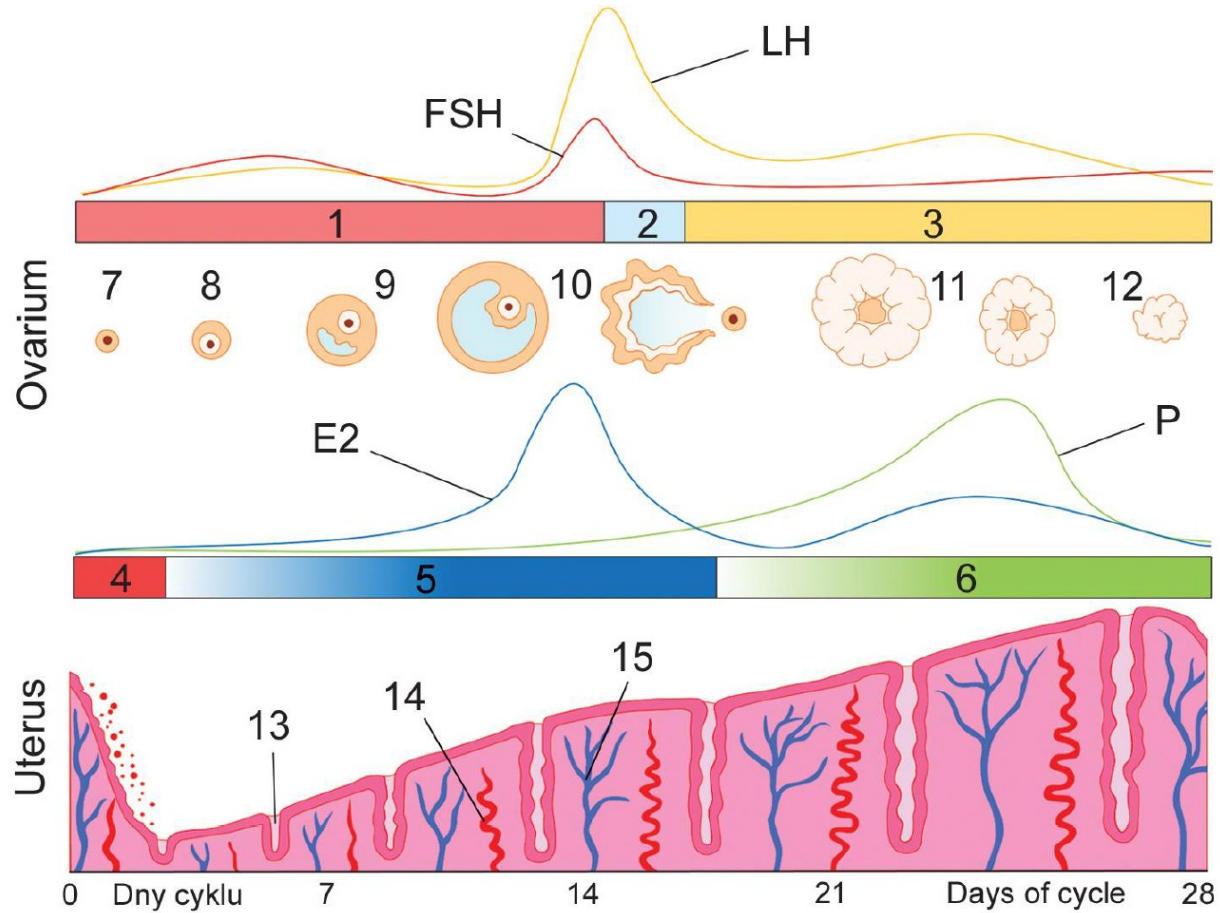
A nuclear envelope forms around each set of chromosomes. The cytoplasm divides.



Gamety – spermie & oocyt



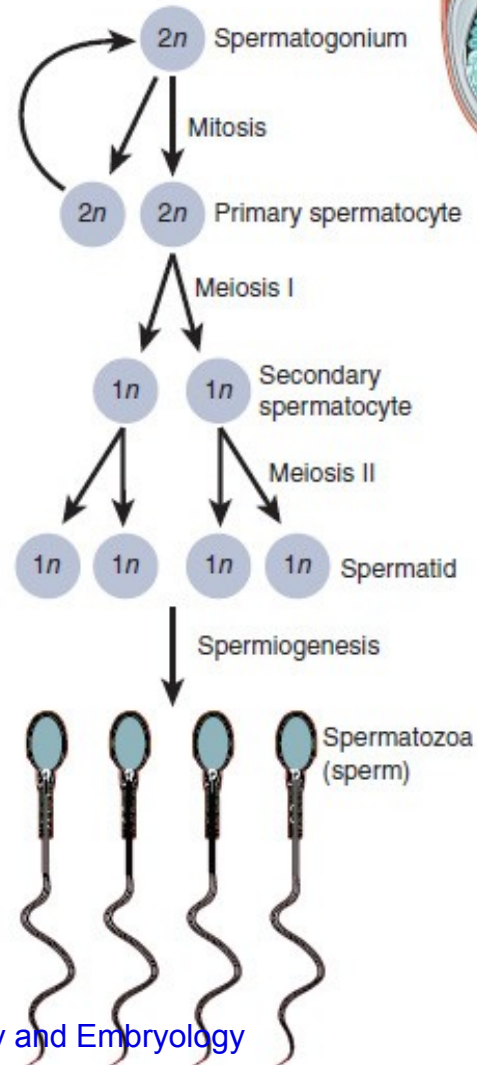
Oogeneze



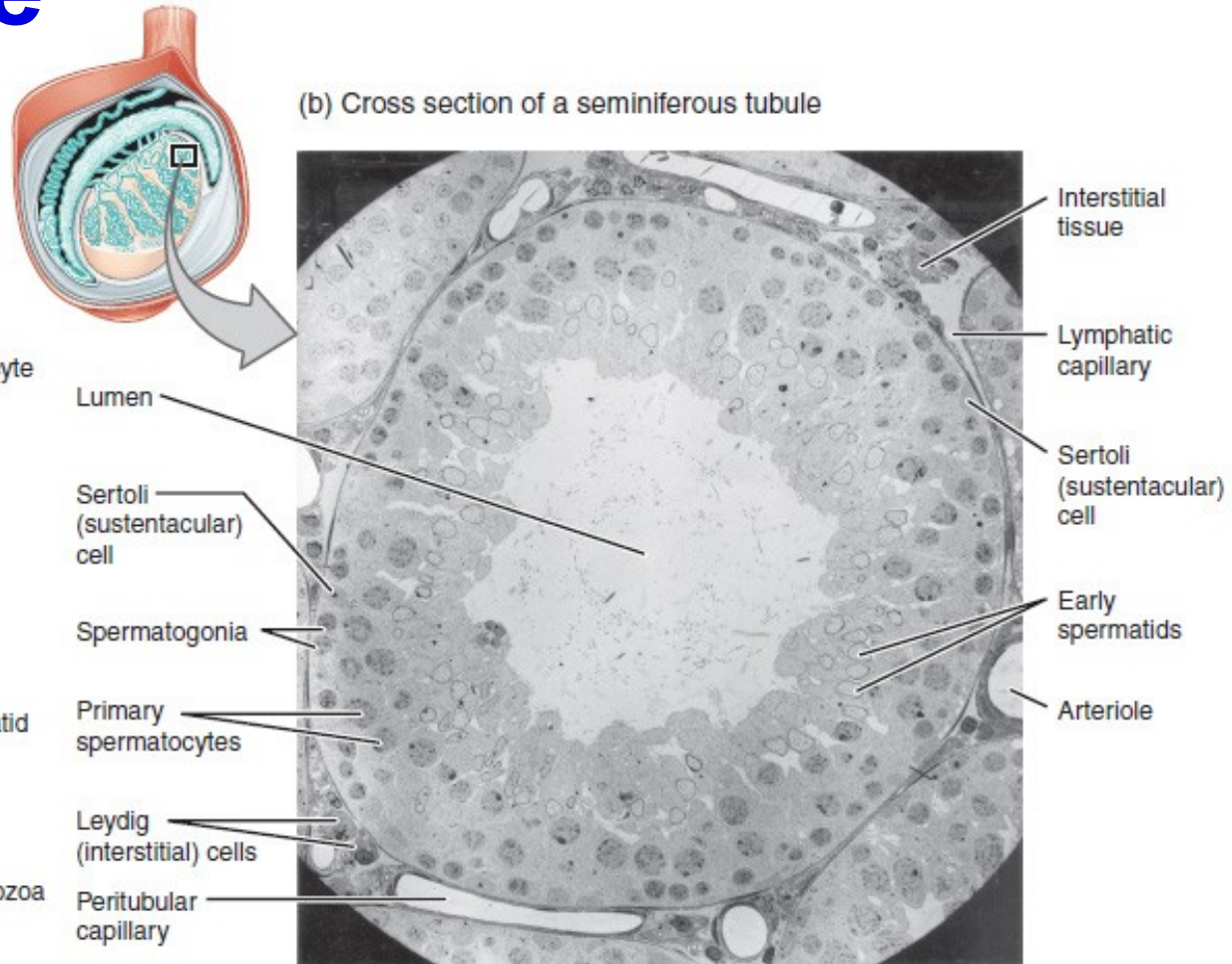
Spermatogeneze



(a) Spermatogenesis



(b) Cross section of a seminiferous tubule



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Yoni Solomonov
&
Petr Vaňhara

2020