2019/2020 year
Developmental Biology I (fall semester)

Director of course: *Nandor Nagy, PhD*
Code: AOVANT457_1A
Credit points: 3
Type of course: elective
Topics of the course: Molecular regulation of ontogeny and developmental malformations. Teratogenesis.
Place and time of course: Huzella Auditorium in the Department of Anatomy, Histology and Embryology (Tűzoltó u.58), second floor, every Thursday, 16:30-18:00.

1) Introduction to developmental biology and its significance in medical curriculum
   12th September (*Imre Oláh)*

2) Beginning of developmental biology. Organization centers, Spemann organiser and its molecular background.
   19th September *(Ildikó Bódi*)

3) Regulatory factors in ontogeny I. Transcription factors and Hox genes, segmentation of the body.
   26th September (*Tamás Kovács)*

4) Regulatory factors in ontogeny II. Signal molecules. Growth factors.
   3rd October *(Krisztina Herberth-Minkó*)

5) Experimental methods of developmental biology
   10th October (*Nándor Nagy*)

6) Stem cell biology and regeneration
   17th October (*Nándor Nagy*)

7) cancelled

8) Epithelial morphogenesis: role of basal membrane in cell migration, branching of epithelia.
   31st October (*Katalin Kocsis*)

9) Germ cell line determination: specification, migration, development
   7th November (*Dávid Dóra*)

10) Gastrulation
   14th November (*Katalin Kocsis*)

11) Epithelial stem cells and endoderm differentiation
   21st November (*Ildikó Bódi*)

12) Patterning of mammalian embryo: antero-posterior and dorso-ventral patterning
   28th November (*Nándor Nagy*)

13) Formation of embryonic mesoderm
   5th December (*Imre Oláh*)

14) Human reproductive biology (Brain sex)
   12th December (*Imre Oláh*)