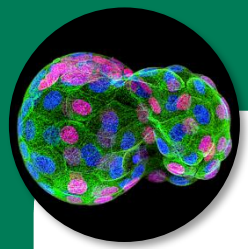
LABORATORY OF EARLY MAMMALIAN DEVELOPMENTAL BIOLGY (LEMDB)

Přírodovědecká fakulta
Faculty of Science



Study the very start of life!

When a mammalian sperm and egg fuse in the female reproductive tract, an amazing train of events is set in motion that ultimately results in an infant live birth. The developmental stages that immediately follow this fertilisation event give rise to a dividing embryo that during this early period sustains itself until implantation into the maternal uterus.

During this "preimplantation" developmental period the one cell zygote undergoes a series of cell divisions that ultimately leads to a formation of a blastocyst embryo (ready to implant - *see above picture*) comprising three distinct cell types. The Trophectoderm (a precursor of the placenta), the Primitive Endoderm (that leads to the formation of other supportive tissues) and the Epiblast (a progenitor pool for building the foetus).

Join the research team!

I received my Ph.D. in 2004 at University of Leeds, UK. After 7 years post-doctoral training in Cambridge (UK), I established the LEMDB at this Faculty (in 2010) as a Marie Curie Integration Grant Fellow.
To date 5 Masters students have have graduated from our group. My current team has 2 post-doctoral researchers, 3 PhD students and 3 undergraduate students.

Contact:
prof. Alexander W. Bruce, Ph.D.
Laboratory of Early Mammalian Developemntal Biology (LEMDB)
Department of Molecular Biology and Genetics, Faculty of Science, University of South Bohemia in České Budějovice, Czech Republic
Facebook: LEMDB & X: LEMDB1
ORCID: 0000-0003-4297-4412
Researcher ID: H-4235-2014
awbruce@prf.jcu.cz

Potential Master´s research project 2024-2026:

Using genetically encoded fluorescent reporters of small G-protein activity during establishment of intra-cellular polarity in the developing preimplantation mouse embryo

Enrol in the new two-year Masters Programme Functional Genetics & Bioinformatics at Faculty of Science, University of South Bohemia in České Budějovice, Czech Republic.

Offered specializations:
- Bioinformatics
- Biotechnology
- Human Molecular Genetics
- Molecular Cell Biology & Genetics

Application deadline: 19 May 2024
Study start: September 2024

Find more information HERE