The diverse role of Ldb1 in cell differentiation
and mouse embryonic development

1. The generation of embryoid bodies from embryonic stem cells is a useful tool to study embryonic development and cell differentiation. (this thesis)

2. Ldb1 is an essential regulator of mouse embryonic development and begins to function at the onset of gastrulation or very soon after. (this thesis)

3. Ldb1 has a dual role in hematopoietic development as a regulator of progenitor cell proliferation and differentiation. (this thesis)

4. The deletion of Ldb1 has a negative impact on the proliferation capacity of in vitro differentiated neural stem cells; however their differentiation potential is not affected. (this thesis)

5. Flk1+ hemangioblast cells and in vitro differentiated Neural Stem Cells express common genes, whose expression pattern is altered when the Ldb1 gene is deleted. (this thesis)


7. The knowledge acquired from the investigation of the hemogenic potential of the endothelium in the mouse embryo and the translation of this knowledge to the human system could be of great assistance in generating human HSCs from human ES cells, either by direct cell reprogramming or indirectly through induced pluripotent stem cells. Momoko Yoshimoto and Mervin C. Yoder, Nature, 2009

8. A hidden connection is stronger than an obvious one. Heraclitus of Ephesus

9. In the long history of humankind (and animal kind, too) those who learned to collaborate and improvise most effectively have prevailed. Charles Darwin

10. Imagination is more important than knowledge… Albert Einstein

11. Equipped with his five senses, man explores the universe around him and calls the adventure Science. Edwin Powell Hubble

Athina Mylona, June 10th 2009