

Petr, J.: **Klonování. Hrozba nebo Naděje? [Cloning. Threat or Hope?]**. - Paseka, Praha 2003. 368 pp. In Czech. Hardcover CZK 269.00. ISBN 80-7185-469-7.

This book deals with many aspects of applications of molecular biology and genetics. It is divided into 3 parts: Miracles in the test-tube, Clone, clone, clone..., and Games with the genes. The first part is composed of 7 chapters: How we get to the world, When the nature fails, Biological risks of assisted reproduction, Ethical questions on assisted reproduction, Search for a healthy embryo, A girl or a boy, Assisted reproduction in domestic animals. The second part is composed of 8 chapters: Before the sheep Dolly was born, The world for "Dolly", Difficulties and risks of cloning, A man is a clone to a man, Ethics of cloning, How to avoid cloning, Saving of endangered species, Cloning and agriculture. Finally, the third part is composed of 5 chapters: Of mice and men, Genetically modified agricultural animals, Genetically modified animals for men, Moral and ethics of genetic modifications of animals, We are touching human genes.

As already the titles of the chapters show, the author deals with all aspects of assisted reproduction, cloning and genetically modified organisms. In all these areas the author describes in reasonable extent the basic biological processes involved, how and why we modify them, what may be the unwanted consequences, what are the ethical problems and also what legal problems we can face. In the part devoted to assisted reproduction the author described the technique of *in vitro* fertilization, the choice

of the best developing embryo, freezing of the superfluous embryos and biological, ethical and legal problems, which may be encountered. Assisted reproduction in animals is described as well. The part devoted to cloning describes how the sheep Dolly was cloned, how cloning is performed and all the technical and ethical problems connected with it. Special attention is devoted to cloning cell lines from embryonal cells, which can be used in human medicine. The possibility to gain these lines from other than embryonal cells is also discussed. The final part is devoted to genetic modifications and concerns mainly manipulations of animals for increasing quality and quantity of meat and other products. The last chapter describes the possibility of gene therapy in men: *e.g.* transferring a gene, which is lacking using adenovirus as the vehicle for transformation. It is shown that there are still many technical problems to be dealt with.

The whole book is written very clearly and on the level understandable also for educated laymen. It can be thus recommended to any reader with basic biological education. The book gives to the reader a useful orientation and basic knowledge about assisted reproduction, cloning and about possible practical use of genetic modifications and all the problems involved. This knowledge is then necessary so that one can make up his/her own opinion on this hot issue.

I. MACHÁČKOVÁ (Praha)