

Themes for PhD admission

Biotechnological exploitation of micro-organisms and plants

- Compounds with pharmaceutical value.
- Bioremediation.
- In vitro plant cultures and germplasm conservation.

Genetic manipulation of organisms

- Fundamental techniques of gene manipulation.
- Genetic transformation of organisms.
- Genome editing: use of specific nucleases ZFNs, TALENs, CRISPR-Cas system

Bibliography

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- Primrose S.B., Twyman R.M.** 2006. Principles of Gene Manipulation and Genomics. 7th edition, Blackwell Publishing.
- Trigiano, R.N., Gray, D.** 2005. Plant Development and Biotechnology, CRC PressLLC.
- Wink, M.** 2006. An Introduction to Molecular Biotechnology, Ed. Willey-VCH Verlag GmbH & Co. KgaA
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