

Evaluation of New Drugs

I.M. Sechenov First Moscow State Medical University

Degree or qualification is awarded: **Certificate of Accreditation**

Language of study:

Mode of study: **distance learning**

Duration: **144 hours**

Availability of free education: **no**

Price:

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The program allows individuals with higher or secondary professional pharmaceutical, chemical, chemical and technological, biological, biotechnological, medical or veterinary education, and those who have completed an educational program of professional retraining of specialists in Industrial Pharmacy.

The purpose of the Program is to form competences on critical assessment of data during exploratory new drugs research study, evaluation of action mechanisms and choice of study methods for new therapeutic molecules.

- A cascade of reactions in the receptor response. Receptor types. Ion channels. The structure of DNA and RNA. The structure of the gene. Replication and amplification of DNA. Transcription and translation. The role of genomics in research. Basics of Proteomics and basic analytical methods. Computer modeling and drug design. Strategies for virtual screening. Virtual Library. Determining the structure of the target. Active center pharmacophores. Docking. Basic principles of toxicology studies. Metabolites and cell cultures. Cytotoxicity and Apoptosis. Mutagenicity. Cytotoxicity. Basic principles of pharmacological studies. Model types of laboratory animals. Stages of study in vitro. Models of Parkinson's disease and stroke. Models of depression and Alzheimer's disease. Development of pharmaceutical biotechnology. Reproduced drugs and biosimilars.

Specializations within this programme