

Appendix no. 2
To the Program of Development of Biotechnology in Russia for 2006 – 2015

**Program “Development of Biotechnology in Russia for 2006-2015”.
List of Activities**

Item no	Name of activity	Term	Responsible	Planned cost, millions of rubles /Sources of finance	Expected results
1.	PART 1. NATIONAL PRIORITY PROJECTS	2006 – 2015	Organizations (on competitive basis)	62600,0/Fed.Budget/ Non-budget sources	Implementation of important state activities, vital for national security with the help of modern biotechnologies
	Stages I – III	2006 – 2015			
1.1.	Project “National museums and collections” (National bio-resource centers)	2006 – 2015	Organizations (on competitive basis)	6000,0/	Preserving and rational use of genetic resources of Russia as the basis of biotechnology development.
1.1.1.	Estimation and activities to preserve collections of micro-organisms	2006 – 2009	Organizations (on competitive basis) IBFM, GosNII Genetics	2000,0/ Fed. budget.	Preserving microbiological collections of federal importance
1.2.	Project “Organization of production of glucose and fructose syrups in volume not less than 1 million tons”	2006 – 2015	Organizations (on competitive basis)	12600,0/ Fed. budget./Reg. budget./Non-budget	Creating a modern raw material base to provide optimal diet for the population and to develop microbiological industry. Providing import sugar replacement (by 20%)
1.3.	Project “Organization of feed and food protein production in volume not less than 1 million tons based on bioconversion of plant raw material”	2006 – 2015	Organizations (on competitive basis)	7000/ Fed. budget./Reg. budget./Non-budget	Creating domestic technological basis to develop animal and poultry farming

Item no	Name of activity	Term	Responsible	Planned cost, millions of rubles /Sources of finance	Expected results
1.4.	Project «Organization производства альтернативного моторного топлива на основе биоэтанола, биодизеля и биогаза в объеме не менее 5% от общего баланса»	2006 – 2015	Organizations (on competitive basis)	12000/ Fed. budget./Reg. budget./Non-budget	Replacing 5% hydrocarbon raw material by biofuels (bioethanol, biodiesel and biogas), produced from renewable raw materials. Solving problems of ecology and economy.
1.5.	Project «Transition of chemical enterprises to not less than 10% of renewable raw materials»	2006 – 2015	Organizations (on competitive basis)	15000/ Fed. budget./ Reg. budget./ Non-budget	Introducing progressive resource-saving technologies based on renewable materials and biocatalysts in chemical industry. Achieving economical effect.
1.6.	Project «Development and introduction of ecologically safe system of bioagriculture»	2006 – 2015	Organizations (on competitive basis)	5000/ Fed. budget./ Reg. budget./ Non-budget	Creating and wide-scale introduction of modern bioagriculture systems in a number of Russian regions. Solving problems of ecology and economy.
1.7.	Additional projects	2006 – 2015	Organizations (on competitive basis)	5000/ Fed. budget./ Reg. budget./ Non-budget	Решение актуальных общегосударственных проблем с помощью биотехнологий (development водородной энергетики, creating топливных ячеек на основе биокатализа и т.д.)
2.	PART 2. FEDERAL PROJECTS	2006 – 2015	Organizations (on competitive basis)	48800/ Fed. budget./ Reg. budget./ Non-budget	Solving vital problems of national economy of federal significance based on active use of biotechnology
2.1.	Stream “Fundamental biotechnology”	2006 – 2015	Organizations (on competitive basis)	4000,0/ Fed. budget.	Development актуальных проблем фундаментальной биотехнологии как основы для ускоренного развития отечественной биотехнологии
	Stages I – III	2006 – 2015			

Item no	Name of activity	Term	Responsible	Planned cost, millions of rubles /Sources of finance	Expected results
2.1.1.	Project «Developing new biotechnological methods based on post-genomic technologies (proteomics, metabolomics, etc.)	2006 – 2015	Organizations (on competitive basis) IBCh RAS, IMB RAS	450,0/ Fed. budget.	New biotechnological methods to solve practical problems
2.1.2.	Project «Bioinformatics»	2006 – 2015	Organizations (on competitive basis) MSU, IMG, Novosibirsk University	600,0/ Fed. budget.	Creating better mathematical models of a cell and using them in practice
2.1.3.	Project “Nanobiotechnologies”	2006 – 2015	Organizations (on competitive basis)	1000,0/ Fed. budget.	Fundamental knowledge and models to be applied in practice for various branches
2.1.4.	Project «Antropogenomics»	2006 – 2015	Organizations (on competitive basis) Institute of bio-chemistry and genetics (Ufa), Institute of immunology	500,0/ Fed. budget.	Creating theoretical basis for ethno- and anthrop genetics to develop new methods for diagnostics, treatment and preserving the gene pool
2.1.4.1.	Subproject «Genetic Passport»	2006 – 2015	Organizations (on competitive basis) Institute of general genetics RAS, Institute of biochemistry and genetics (Ufa)	200,0/ Fed. budget.	Creating genetic passports for pilot groups (experimental groups, sportsmen, order groups, etc.)

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2.1.4. 2.	Reserve subprojects	2006 – 2015	Organizations (on competitive basis)	300,0/ Fed. budget.	Solving priority problems of anthrop genetics
2.1.5.	Project «Биоразнообразии и биобезопасность»	2006 – 2015	Organizations (on competitive basis) Institute of ecology and evolution problems RAS	250,0/ Fed. budget.	Developing models to preserve biocenoses Creating databases and methods of monitoring and eliminating biological threats to ecosystems
2.1.6.	Project «Development новых технологических решений в физико-химической биологии»	2006 – 2015	Organizations (on competitive basis)	900,0/ Fed. budget.	Absolutely new theoretic, methodological and practical solutions using systematic biology.
2.1.6. 1.	Subproject «Biocatalysts»	2006 – 2015	Organizations (on competitive basis)	450,0/ Fed. budget.	Theoretical basis of biocatalysis with emphasis on practical application
2.1.6. 2.	Reserve subprojects	2006 – 2015	Organizations (on competitive basis)	450,0/ Fed. budget.	
2.1.7.	Additional projects	2006 – 2015	Organizations (on competitive basis)	300,0/ Fed. budget.	Obtaining new fundamental knowledge to be used in technology
2.2.	Stream «Medical biotechnology»	2006 – 2015	Organizations (on competitive basis)	9800,0/Fed. budget./Reg. budget./Non-budget	Creating отечественных лекарств, вакцин и изделий медицинского назначения с использованием современных биотехнологий
	Stages I – III	2006 – 2015			

Item no	Name of activity	Term	Responsible	Planned cost, millions of rubles /Sources of finance	Expected results
2.2.1.	Project «Vital medical drugs»	2006 – 2015	Organizations (on competitive basis)	5500,0/Fed. budget./Reg. budget./Non-budget	Providing modern vital domestic medical drugs for the population, and consequently, improving the life quality and preventing depopulation of the country. Solving the problems of import replacement in no less than 30% of the basic groups of drugs
2.2.1.1.	Subproject «Prospective biogenerics»	2006 – 2015	Organizations (on competitive basis)	2500,0/Fed. budget./Reg. budget./Non-budget	Production of generics relevant for national economy in needed volume, providing the most necessary drugs
2.2.1.1.1.	Topic «Hormones (insulin, growth hormone, etc.)	2006 – 2015	Organizations (on competitive basis)	1100,0/Fed. budget./Reg. budget./Non-budget	Providing the population with domestic gene-engineering hormones
2.2.1.1.2.	Reserve topics	2006 – 2015	Organizations (on competitive basis)	500,0/Fed. budget./Reg. budget./Non-budget	Production of modern domestic drugs based on cytokines to treat oncological, virus, etc diseases of social significance
2.2.1.1.3.	Reserve topics	2006 – 2015	Organizations (on competitive basis)	900,0/Fed. budget./Reg. budget./Non-budget	
2.2.1.2.	Subproject “Therapeutic monoclonal antibodies”	2006 – 2015	Organizations (on competitive basis) Institute of experimental cardiology RKNPK	600,0/Fed. budget./Reg. budget./Non-budget	Development and production of therapeutic monoclonal antibodies – one of the most modern methods to treat cardiological, oncological, etc. diseases
2.2.1.3.	Subproject «Development and production of new medical drugs based on peptides»	2006 – 2015	Organizations (on competitive basis)	300,0/ Fed. budget./Reg. budget./Non-budget	Production of socially important drugs based on peptides

Item no	Name of activity	Term	Responsible	Planned cost, millions of rubles /Sources of finance	Expected results
2.2.1.4.	Subproject "Development and production of new medical drugs based on biotechnological substances"	2006 – 2015	Organizations (on competitive basis)	1000,0/ Fed. budget./Reg. budget./Non-budget	Development и production новых лекарственных препаратов на основе рекомбинантных белков, ДНК и др.
2.2.1.5.	Reserve subprojects	2006 – 2015	Organizations (on competitive basis)	1100,0/ Fed. budget./Reg. budget./Non-budget	
2.2.2.	Project «New generation of vaccines»	2006 – 2015	Organizations (on competitive basis) Institute of virus drugs RAMS, Center of virology IM ME RF	2200,0/Fed. budget./Reg. budget./Non-budget	Development, creating and production of vaccines of new generation for prophylactics of socially important diseases
2.2.3.	Project «In vitro diagnosticums»	2006 – 2015	Organizations (on competitive basis)	1100,0/Fed. budget./Reg. budget./Non-budget	Production of in vitro diagnosticums to perfect the laboratory diagnostics system of the country
2.2.4.	Project «Scientific-methodical and practical aspects of using human stem cells»	2006 – 2015	Organizations (on competitive basis)	300,0/Fed. budget./Reg. budget./Non-budget	Development of theoretic, methodological practical and ethical bases of cell technology
2.2.4.1.	Subproject: «Creating hi-tech test systems based on different types of stem cells to estimate new biotechnological and pharmacy drugs»	2006 – 2009	Organizations (on competitive basis) Center of high technology "ChimRar", Institute of development biology RAS	100,0/Fed. budget./Reg. budget./Non-budget	Development of effective criteria of complex estimation and standardization of stem cell lines, creating protocols for testing of different biologically active substances on cell models, obtained from the differentiated stem cells

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2.2.4.2.	Reserve subprojects	2006 – 2015	Organizations (on competitive basis)	200,0/Fed. budget./Reg. budget./Non-budget	
2.2.5.	Project: «Socially important diseases (virus hepatitis, AIDS, tuberculosis)»	2006 – 2015	Organizations (on competitive basis) Bioprocess group of companies, LLC	300,0/Fed. budget./Reg. budget./Non-budget	Creating and introduction of a complex of modern drugs and technologies for diagnostics, prophylactics and treatment of socially important diseases (virus hepatitis, AIDS, tuberculosis)
2.2.6	Additional projects	2006 – 2015	Organizations (on competitive basis)	400,0/Fed. budget./Reg. budget./Non-budget	Solving present-day problems of medical biotechnology
2.3.	Stream «Agricultural biotechnology»	2006 – 2015	Organizations (on competitive basis)	5000,0/Fed. budget./Reg. budget./Non-budget	Introduction of biotechnological methods to various fields of agriculture
	Stages I – III	2006 – 2015			
2.3.1.	Project «Domestic transgenic plants»	2006 – 2015	Organizations (on competitive basis) SE Center “Bio-engineering” RAS, Institute of plant physiology RAS	1200,0/Fed. budget./Reg. budget./Non-budget	Development of theoretic, methodic and practical bases of creation of transgenic plants in domestic establishments. Conducting field longitude research and experimental work

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2.3.2.	Project «Biological plant protection (biopesticides)»	2006 – 2015	Organizations (on competitive basis) “Vostok” PLC	600,0/Fed. budget./Reg. budget./Non-budget	Development and production of modern biopesticides. Import replaced by 50%
2.3.3.	Project «Veterinary biotechnology (vaccines, drugs, etc.)»	2006 – 2015	Organizations (on competitive basis)	600,0/Fed. budget./Reg. budget./Non-budget	Development and production of new vaccines, diagnosticums and veterinary drugs. Import replaced by 70%
2.3.4.	Project «Domestic transgenic animals»	2006 – 2015	Organizations (on competitive basis)	300,0/Fed. budget./Reg. budget./Non-budget	Creating experimental models of transgenic animals
2.3.5.	Project «Soil biocenosis»	2006 – 2015	Organizations (on competitive basis)	1100,0/Fed. budget./Reg. budget./Non-budget	Development of theoretic and practical bases for biological farming. Experimental testing of typical models in different agricultural landscapes
2.3.5.1	Subproject «Biofertilizers»	2006 – 2015	Organizations (on competitive basis)	200,0/Fed. budget./Reg. budget./Non-budget	Wide-scale introduction of biofertilizers to agricultural biotechnology
2.3.5.2	Reserve subprojects	2006 – 2015	Organizations (on competitive basis)	900,0/Fed. budget./Reg. budget./Non-budget	-
2.3.6.	Project «Biology and biotechnology of fungi»	2006 – 2015	Organizations (on competitive basis)	150,0/Fed. budget./Reg. budget./Non-budget	Development and organization of production of a complex of equipment and technologies for wide scale fungi and fungi-based products production
2.3.7.	Additional projects	2006 – 2015	Organizations (on competitive basis)	1050,0/Fed. budget./Reg. budget./Non-budget	Solving present-day problems of agricultural biotechnology

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2.4.	Stream «Food biotechnology»	2006 – 2015	Organizations (on competitive basis)	4000,0/Fed. budget./Reg. budget./Non-budget	Providing the population with high-quality foodstuffs, produced using biotechnology
	Stages I – III	2006 – 2015			
2.4.1.	Project «Functional nutrition»	2006 – 2011	Organizations (on competitive basis)	1600,0/Fed. budget./Reg. budget./Non-budget	Development of theoretical; and practical bases for optimal; nutrition. Creating methodic recommendations and launching domestic production based on new technologies
2.4.1.2.	Subproject «Child nutrition»	2006 – 2011	Organizations (on competitive basis)	600,0/Fed. budget./Reg. budget./Non-budget	Development of diet schemes for natural and artificial nutrition for the newborns and junior schoolchildren. Creating optimal diets for children and schoolchildren
2.4.1.3.	Reserve subprojects	2006 – 2011	Organizations (on competitive basis)	1000,0/Fed. budget./Reg. budget./Non-budget	-
2.4.2.	Project «Biotechnologies in bakery»	2006 – 2015	Organizations (on competitive basis)	850,0/Fed. budget./Reg. budget./Non-budget	Providing cheap high quality bakery products based on biotechnological achievements
2.4.2.1.	Subproject «Bakery leaven»	2006 – 2015	Organizations (on competitive basis)	400,0/Fed. budget./Reg. budget./Non-budget	Organization of producing bakery leaven based on prospective strains
2.4.2.2.	Reserve subprojects	2006 – 2015	Organizations (on competitive basis)	450,0/Fed. budget./Reg. budget./Non-budget	
2.4.3.	Project «BAA biotechnology»	2006 – 2015	Organizations (on competitive basis)	200,0/Fed. budget./Reg. budget./Non-budget	Organization of monitoring and databases of natural and artificial BAA. Selecting and introducing the best domestic BAA for optimal nutrition

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2.4.3. 1.	Subproject «Prebiotics, probiotics, sinbiotics»	2006 – 2008	Organizations (on competitive basis)	100,0/Fed. budget./Reg. budget./Non-budget	Development of theoretic and scientific bases of using prebiotics, probiotics and sinbiotics for prophylactics and treatment
2.4.3. 2.	Reserve subprojects	2006 – 2015	Organizations (on competitive basis)	100,0/Fed. budget./Reg. budget./Non-budget	
2.4.4.	Project «Seafood biotechnology»	2006 – 2015	Organizations (on competitive basis)	350,0/Fed. budget./Reg. budget./Non-budget	Production of the most prospective food ingredients using seafood
2.4.5.	Project «Foodstuffs safety»	2006 – 2015	Organizations (on competitive basis)	200,0/Fed. budget./Reg. budget./Non-budget	Creating a system of independent professional expertise of foodstuffs quality, including GMI analysis, toxin content, etc.
2.4.6.	Additional projects	2006 – 2015	Organizations (on competitive basis)	800,0/ Fed. budget./Reg. budget./Non-budget	Solving present-day problems of food biotechnology
2. 5.	Stream «Ecological biotechnology»	2006 – 2015		1500,0/Fed. budget./Reg. budget./Non-budget	Solving problems of ecology using biotechnology
	Stages I – III	2006 – 2015			
2.5.1.	Project «Biotechnological bases of nature, industrial and human environment protection»	2006 – 2015	Organizations (on competitive basis)	300,0/Fed. budget./Reg. budget./Non-budget	Creating systems of biological monitoring and means of biological protection for environment
2.5.2.	Project «Bioremediation»	2006 – 2015	Organizations (on competitive basis)	300,0/Fed. budget./Reg. budget./Non-budget	Development and wide-scale introduction of modernways of agrolandscape restoration using biotechnology methods
2.5.3.	Project «Biotechnological bases of creating ecologically clean flats»	2009 – 2015	Organizations (on competitive basis)	500,0/Fed. budget./Reg. budget./Non-budget	Development of typical models and experimental production of ecologically clean flats based on biotechnology

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2.5.4.	Additional projects	2006 – 2015	Organizations (on competitive basis)	400,0/Fed. budget./Reg. budget./Non-budget	Solving present-day problems of ecology using biotechnology
2.6.	Stream «Industrial biotechnology»	2006 – 2015	Organizations (on competitive basis)	12700,0/Fed. budget./Reg. budget./Non-budget	Expansion of domestic industrial production of the most important biotechnological produce
	Stages I – III	2006 – 2015			
2.6.1.	Project «Large production of ferments for different branches of national economy»	2006 – 2015	Organizations (on competitive basis), “Vostok” PLC	2500,0/Fed. budget./Reg. budget./Non-budget	Industrial production of different ferments. Import replaced by 50%
2.6.2.	Project «Biotechnological production of amine acids»	2006 – 2015	Organizations (on competitive basis)	1500,0/Fed. budget./Reg. budget./Non-budget	Organization of domestic industrial production of the most important amine acids to be used in pharmacy, food, feed, etc. Branches.
2.6.2.1.	Subproject «Lysine»	2006 – 2015	Organizations (on competitive basis)	900,0/Fed. budget./Reg. budget./Внебюдж	Domestic lysine production in volume not less than 10,000 tons to satisfy the needs of animal and poultry farming
2.6.2.2.	Reserve subprojects	2006 – 2015	Organizations (on competitive basis)	600,0/Fed. budget./Reg. budget./Non-budget	
2.6.3.	Project «Expansion of antibiotic substances production»	2006 – 2015	Organizations (on competitive basis)	2000,0/Fed. budget./Reg. budget./Non-budget	Organization of modern antibiotic substances production
2.6.4.	Project «Industrial production of biodegraded polymers»	2009 – 2015	Organizations (on competitive basis)	2100,0/Fed. budget./Reg. budget./Внебюдж	Development and wide-scale production of different biodegraded polymers to solve the problems of ecology
2.6.5.	Project «Production of vitamins»	2009 – 2015	Organizations (on competitive basis)	1500,0/Fed. budget./Reg. budget./Non-budget	Organization of the most important vitamins substances production to satisfy the needs of human and veterinary medicine

Item no	Name of activity	Term	Responsible	Planned cost, millions of rubles /Sources of finance	Expected results
2.6.6.	Project «Production of polysaccharides»	2009 – 2015	Organizations (on competitive basis)	700,0/Fed. budget./Reg. budget./Non-budget	Production of different polysaccharides for food, mining, etc. industry
2.6.7.	Project «biogeochemistry»	2006 – 2015	Organizations (on competitive basis)	600,0/Fed. budget./Reg. budget./Non-budget	Introduction of biotechnological methods in mining industry
2.6.7. 1.	Subproject «Application of biotechnology in gold mining industry»	2006 – 2015	Organizations (on competitive basis)	300,0/Fed. budget./Reg. budget./Non-budget	Wide-scale use of biotechnology for gold extraction from depleted ores
2.6.7. 2.	Reserve subprojects	2006 – 2015	Organizations (on competitive basis)	300,0/Fed. budget./Reg. budget./Non-budget	
2.6.8.	Creating a system of support for small and middle sized companies in biotechnological industry	2009 – 2015	Organizations (on competitive basis)	1000,0/ Fed. budget./Reg. budget./Non-budget	Wide-range creating small and middle sized biotechnological enterprises as a basis for intensive development of biotechnological industry, introduction of innovative projects, creating vacancies for staff qualified in biotechnology
2.6.8.	Additional projects	2009 – 2015	Organizations (on competitive basis)	800,0/ Fed. budget./Reg. budget./Non-budget	Solving present-day problems of industrial biotechnology
2.7.	Stream «Legal, economic and organizational support of biotechnology development»	2006 – 2015		2300,0/ Fed. budget./Reg. budget./Non-budget	Upgrade and creation of laws and acts, development of economic mechanisms and implementing information and organizational support to develop biotechnology
	Stages I - III	2006 – 2015			
2.7.1.	Project «Perfection of the current federal and regional legal bases and making them consistent for biotechnology, including adapting them to the international normative acts»	2006 – 2015	Organizations (on competitive basis)	200,0/Fed. budget./Reg. budget	Законы и подзаконные акты в новой редакции

Item no	Name of activity	Term	Responsible	Planned cost, millions of rubles /Sources of finance	Expected results
2.7.2.	Project «Developing and passing new laws and normative acts, regulating the scientific-practical activities in biotechnology»	2006 – 2015	Organizations (on competitive basis)	300,0/Fed. budget./Reg. budget	New laws and normative acts
2.7.3.	Project «Regulation of the system of industrial normative acts for legal and economic mechanisms in biotechnology and related industries	2006 – 2015	Organizations (on competitive basis)	100,0/Fed. budget./Reg. budget	Corrected normative acts and databases
2.7.4.	Project «Development of typical innovative models for biotechnology»	2006 – 2015	Organizations (on competitive basis)	300,0/Fed. budget./Reg. budget/ Non-budget	Creating typical models for biotechnological techno parks and bioclusters. Providing effective state-private partnership in coordination of innovations
2.7.5.	Project «Information technologies in biotechnology (databases, the latest mobile and telecommunication technologies)»	2006 – 2015	Organizations (on competitive basis)	800,0/Fed. budget./Reg. budget/ Non-budget	Creating databases. Introduction of the latest information technologies. Creating automatic control and management systems for biotechnological production
2.7.6.	Project «Organizational, technical, analytical, publishing and co-ordination activities in biotechnology»	2006 – 2015	Organizations (on competitive basis)	400,0/Fed. budget./Reg. budget/ Non-budget	Creating an effective system of organizational and technical support for the Program. Instructions, methodic comments, databases. Organization of conference and exhibitions
2.7.7.	Additional projects	2006 – 2015	Organizations (on competitive basis)	200,0/Fed. budget./Reg. budget/ Non-budget	Solving present-day problems of legal, economic, informational and organizational support to develop biotechnology in Russia
2.8.	Stream «Material and technical basis»	2006 – 2015		8000,0 / Fed. budget./Reg. budget./Non-budget	Creating современной материально-технической базы для развития отечественной биотехнологии
	Stages I - III	2006 – 2015			
2.8.1.	Project «Модернизация материально-технической базы биотехнологических предприятий и организаций»	2006 – 2009	Organizations (on competitive basis)	2000,0/ Fed. budget./Reg. budget/ Non-budget	Providing a steady transition of domestic biotechnology enterprises to the international quality standards (GMP, ISO9001, ISO14000 etc.)
2.8.2.	Project «Creating a modern domestic equipment base to provide fundamental and applied biotechnology»	2006 – 2009	Organizations (on competitive basis)	1600,0/ Fed. budget./Reg. budget/ Non-budget	Новые отечественные приборы для биологии и биотехнологии

Item no	Name of activity	Term	Responsible	Planned cost, millions of rubles /Sources of finance	Expected results
2.8.2.1.	Subproject «Biochips»	2006 – 2009	Organizations (on competitive basis) IOFAS RAS, IMB RAS, IBCh RAS	1000,0/ Fed. budget./Reg. budget/ Non-budget	Creating original, protected by patents complexes of biochips, complexes of equipment and biochips for research in genomics and proteomics and also for diagnostics in applied branches (medicine, agriculture, food industry, ecology, biosafety)
2.8.2.2.	Subproject «Analytical equipment»	2006 – 2009	Organizations (on competitive basis), Institute of analytical device building RAS	600,0/ Fed. budget./Reg. budget/ Non-budget	Development, creating and fitting with analytical equipment of domestic produce of the leading institutes, universities and biotechnological enterprises
2.8.3.	Project «Technological equipment for biotechnological industry»	2006 – 2015	Organizations (on competitive basis)	1000,0/ Fed. budget./Reg. budget/ Non-budget	Creating basic deliverables and technological lines for biotechnological industry
2.8.3.1.	Subproject «Fermenters»	2006 – 2015	Organizations (on competitive basis), “Sayani” PLC	500,0/ Fed. budget./Reg. budget/ Non-budget	Development and introduction of domestic fermenters of the new generation for industrial biotechnology
2.8.3.2.	Reserve subprojects	2006 - 2015	Organizations (on competitive basis)	500,0/Fed. budget./Reg. budget./Non-budget	
2.8.4.	Project «Reconstruction and building new biotechnological facilities»	2006 – 2015	Organizations (on competitive basis)	2500,0/ Fed. budget./Reg. budget/ Non-budget	Reconstruction of current and building new prospective biotechnology enterprises
2.8.5.	Additional projects	2006 - 2015	Organizations (on competitive basis)	900,0/Fed. budget./Reg. budget/ Non-budget	Dealing with priority issues of material and technical provision
2.9.	Stream «Staff training for biotechnology»	2006 – 2015		500,0 / Fed. budget./Reg. budget/ Non-budget	Creating a training system for staff in domestic biotechnology

Item no	Name of activity	Term	Responsible	Planned cost, millions of rubles /Sources of finance	Expected results
	Stages I - III	2006 – 2015			
2.9.1.	Project «Creating a National scientific and educational center of biotechnology »	2006 – 2008	Organizations (on competitive basis), IBCh RAS	350,0/ Fed. budget./Reg. budget/ Non-budget	Organization of the National staff training center for biotechnology as a key link in the chain of biotechnologists training in Russia. Creating a new training system to prepare specialists with the highest qualifications, including practical training using the latest experimental methods, innovative activity in science and education. Introducing telecommunication and informatization systems to provide integration between the Center and biotechnological SRI, universities and colleges. Creating a distance-learning system for training and extra training for biotechnologists in different regions of Russia
2.9.2.	Project «Creating scientific, educational and industrial complexes in academic towns, science-towns and biotechnology clusters»	2006 – 2008	Organizations (on competitive basis), Puschino Scientific Center RAS, Kirov, Ufa, Tomsk	80,0/ Fed. budget./Reg. budget/ Non-budget	Creating regional training centers for biotechnology staff
2.9.3.	Project «Creating modern educational programs for biotechnology»	2006 – 2008	Organizations (on competitive basis), the main universities	15,0/ Fed. budget./Reg. budget/ Non-budget	Development of new systems, methods and forms of education, preparation and optimization of educational standards, specializations and learning programs in biotechnology
2.9.4.	Project «Creating modern teaching aids for biotechnology»	2006 – 2009	Organizations (on competitive basis), the main universities	10,0/ Fed. budget./Reg. budget/ Non-budget	Development of new teaching aids in biotechnology, including electronic textbooks for theoretical biotechnology and electronic practice materials on the latest experimental methods of biotechnology with videos and pictures

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2.9.4. 1.	Подproject «Innovative teaching and methodical complex for biology teachers “Electronic textbook: step by step”»	2006 – 2009	Organizations (on competitive basis), Kazan State University	3,0/ Fed. budget./Reg. budget/ Non-budget	Electronic biology and biotechnology textbook
2.9.5.	Additional projects	2006 – 2015	Organizations (on competitive basis)	45,0/ Fed. budget./Reg. budget/ Non-budget	Solving present-day problems of staff preparation for biotechnology
2.10.	Federal target program “Priority scientific and practical directions of biotechnology (2009 – 2015 гг.)» (formed and attached separately)	2009 – 2015	Organizations (on competitive basis)	1000,0/ Fed. budget.	Development and implementation of significant scientific and practical federal projects in biotechnology
3.	PART 3. REGIONAL (INTERREGIONAL, DISTRICT) PROJECTS (PROGRAMS) (formed and attached separately)	2006 – 2015		17600,0/Fed. budget./Reg. budget./Non-budget	Solving present-day economic and social regional problems using biotechnology
	Stage I	2006 – 2008			7 regional programs are formed and start being implemented
	Stage II	2009 – 2011			23 other regional programs are formed and implementation is started. Intermediary result for 23 regions Final result for 7 regions
	Stage III	2012 – 2015			Finishing the regional programs. Final result for 23 regions.
3.1.	Regional program «Development of biotechnology in Kirov region (2006–2011)»	2006 – 2011	Executive bodies of Kirov region	1200,0 /Fed. budget. /Reg. budget. /Non-budget	
3.2.	Regional program «Development of biotechnology in Belgorod region (2006–2011)»	2006 – 2011	Executive bodies of Belgorod region	1400,0 /Fed. budget. /Reg. budget. /Non-budget	

Item no	Name of activity	Term	Responsible	Planned cost, millions of rubles /Sources of finance	Expected results
3.3.	Regional program «Development of biotechnology in Tomsk region (2006–2011)»	2006 – 2011	Executive bodies of Tomsk region	600,0 /Fed. budget. /Reg. budget. /Non-budget	
3.4.	Regional program «Development of biotechnology in Tyumen region (2006–2011)»	2006 – 2011	Executive bodies of Tyumen region	1500,0 /Fed. budget. /Reg. budget. /Non-budget	
3.5.	Regional program «Development of biotechnology in Kaliningrad region (2006–2011)»	2006 – 2011	Executive bodies of Kaliningrad region	400,0 /Fed. budget. /Reg. budget. /Non-budget	
3.6.	Additional regional programs	2006 – 2015	Executive bodies of RF regions	12500,0 /Fed. budget. /Reg. budget. /Non-budget	
4.	PART 4. TARGET PROJECTS (non-budget, international, etc projects).	2006 – 2015	Target responsible Organizations	21000,0 /Fed. budget. /Reg. budget. /Non-budget	Implementing special projects, aimed at solving particular, clearly defined tasks using biotechnology
4.1.	Creating a National Screening center to look for biologically active substances	2006 – 2008	Hi-tech center “ChimRar” LLC	50,0 /Non-budget	National Screening center to look for biologically active substances
4.2.	Building a plant for pharmaceutical production	2006 – 2008	“Bioprocess” group of companies, LLC	250,0 /Non-budget	A modern plant producing biotechnology pharmaceuticals
4.3.	Creating a bio-techno park in Moscow region	2006 – 2008	Organization on competitive basis	400,0 /Reg. budget./ Non-budget	A modern innovation technology center in Moscow region
4.4.	Other target projects	2006 – 2015	Organizations, establishments, associations (including the ones from abroad)	20300,0	Solving present-day federal problems including the framework of international partnership

Appendix no 3

To the Program «Development of biotechnology in Russia for 2006–2015 »

**Volume and sources of finance for the Program
«Development of biotechnology in Russia 2006–2015 » (million rubles)**

	Financing volumes										
	2006–2015 (total)	including									
		2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
Total	150000,0	15000,0	15000,0	15000,0	15000,0	15000,0	15000,0	15000,0	15000,0	15000,0	15000,0
including:											
Federal budget	15000,0	1500,0	1500,0	1500,0	1500,0	1500,0	1500,0	1500,0	1500,0	1500,0	1500,0
Regional budgets	45000,0	4500,0	4500,0	4500,0	4500,0	4500,0	4500,0	4500,0	4500,0	4500,0	4500,0
Non-budget sources	90000,0	9000,0	9000,0	9000,0	9000,0	9000,0	9000,0	9000,0	9000,0	9000,0	9000,0
NIOKR – total											
including:											
Federal budget											
Regional budgets											
Non-budget sources											
Other needs – total											
including:											
Federal budget											
Regional budgets											
Non-budget sources											
Investments – total											
including:											
Federal budget											
Regional budgets											
Non-budget sources											