



Vilnius  
University



Research  
Council of  
Lithuania

**THE PROJECTS BEING IMPLEMENTED BY THE PROGRAMMES  
SPONSORED BY THE RESEARCH COUNCIL OF LITHUANIA AT VILNIUS UNIVERSITY**

*Period of 2008–2015*

<b>SOCIAL CHALLENGES TO NATIONAL SECURITY</b>		
<b>Project Title</b>	<b>Duration</b>	<b>Project Leader (Faculty)</b>
<i>Procedural Justice in Lithuanian Criminal, Civil, and Administrative Law</i>	2010–2011	Prof. G. Valickas (Faculty of Philosophy)
<i>Public Trust in the Criminal Justice Institutions in Lithuania and its Determinants</i>	2010–2012	Prof. A. Dobryninas (Faculty of Philosophy)
<i>Personality, Health and Socio-Demographic Dimensions of Psychological Well-Being of Lithuanian Population</i>	2010–2013	Prof. A. Bagdonas (Faculty of Philosophy)
<i>Social Work – Between Dependency and Autonomy</i>	2012–2013	Dr. B. Švedaitė-Sakalauskė (Faculty of Philosophy)
<i>Benefits in Cash and in Kind: Dilemmas of Creating Optimal Model of Social Assistance</i>	2012–2013	Dr. L. Žalimienė (Faculty of Philosophy)
<i>Organizational Citizenship Behaviour in the Context of Work Motivation in Lithuanian Organizations</i>	2012–2013	Dr. D. Bagdžiūnienė (Faculty of Philosophy)
<i>Psychosocial Factors of Psychological Well-Being in the Context of Psychotraumatology</i>	2012–2013	Dr. E. Kazlauskas (Faculty of Philosophy)
<i>Homicide in Lithuania: Criminological Research</i>	2012–2013	Faculty of Philosophy
<i>Challenges of Implementation of Mental Health Policy in Lithuania</i>	2012–2013	Prof. D. Pūras (Faculty of Philosophy)
<i>Social, Economical and Legal Means Reaching the Stability and Development of Families</i>	2012–2013	Dr. V. Mizaras (Faculty of Law)
<i>The Perspective of Multilateral Criminal Asset Confiscation That Crimes Would Not Be Worth It</i>	2012	Dr. R. Šimaitis (Faculty of Law)

THE STATE AND THE NATION: HERITAGE AND IDENTITY		
Project Title	Duration	Project Leader (Faculty)
<i>Development of the National Network of Infrastructure of Lithuanistic Scientific Research and Heritage: the Design Phase</i>	2010–2011	Assoc. Prof. R. Laužikas (Faculty of Communication)
<i>Lithuanian Egodocumental Heritage</i>	2010–2013	Prof. A. Pacevičius (Faculty of Communication)
<i>Tradition, Image and Modern Identity of the Grand Duchy of Lithuania</i>	2010–2013	Prof. A. Bumblauskas (Faculty of History)
<i>Remembrance of Soviet Times in Life Stories: Relationship between Public and Private Discourses</i>		Prof. D. Leinartė (Centre for Gender Studies) Dr. L. Žilinskienė (Faculty of Philosophy)
<i>History Policy as a Factor of Nation and State Building</i>	2010–2012	Prof. R. Lopata (Institute of International Relations and Political Science)
<i>Gervėčiai: History and National Identity</i>	2010–2012	Dr. S. Matulevičienė (Faculty of Philology)
<i>Religion and Culture: the Challenges of the Contemporary World to the Identity</i>	2010–2013	Prof. R. Šerpytė (Centre for Religious Studies and Research)
<i>Identity and Alterity</i>	2010	Dr. N. Čepulis (Centre for Religious Studies and Research)
<i>J. Karłowicz as a Propagator of the Scientific and Cultural Life of the Late XIX and Early XX Century</i>	2012–2013	Dr. M. Davlevič (Faculty of Philology)
<i>The Politics of History as a Source of Geopolitical and Geocultural Identity</i>	2012–2014	Prof. R. Lopata (Institute of International Relations and Political Science)
<i>Emigration and Family: Challenges, Family Resources, Ways of Coping with Difficulties</i>	2012–2014	Dr. I. Juozeliūnienė (Faculty of Philosophy)
<i>Identity of Early Baltic Society According to Investigations of Archaeological Sites in Lithuania</i>	2012–2014	Dr. A. Merkevičius (Faculty of History)
ENERGY OF THE FUTURE		
Project Title	Duration	Project Leader (Faculty)
<i>Micro and Nanostructures for Micro Solid Oxide Fuel Cells (MIKROKOKE)</i>	2010–2011	Prof. A. Kareiva (Faculty of Chemistry)

<i>Preparation of Graphene Coatings with Diverse Thermal Resistance Properties Using Laser Treatment (LAGO)</i>	2010–2011	Prof. J. Barkauskas (Faculty of Chemistry)
<i>Preparation and Investigation of Superionic Ceramics with Fast Oxygen Vacancy Transport for Solid Oxide Fuel Cells</i>	2010–2011	Prof. A. F. Orliukas (Faculty of Physics)
<i>Electrochemical Deposition of CZTSe Layer and Structural and Optoelectrical Characterization</i>	2010–2011	Prof. K. Arlauskas (Faculty of Physics)
<i>Development of New Topic Non-Organic Materials Technologies for Photovoltaics (INGANCIS)</i>	2010–2011	Dr. T. Malinauskas (Institute of Applied Research)
<i>Energy Saving and Psychophysically Acceptable Solid-State Street Lighting</i>	2010–2011	Prof. A. Žukauskas (Institute of Applied Research)
<i>Mesopic Solid-State Light Sources</i>	2012–2014	Prof. A. Žukauskas (Institute of Applied Research)
<i>Technological Processes of Membranes Production for Micro-Solid Oxide Fuel Cells</i>	2012–2014	Prof. A. Kareiva (Faculty of Chemistry)
<b>CHRONIC NON-INFECTIUOS DISEASES</b>		
<b>Project Title</b>	<b>Duration</b>	<b>Project Leader (Faculty)</b>
<i>Imaging of Cardiac Adrenergic Innervation to Assess Risk of Cardiac Insufficiency and Sudden Death</i>	2010–2011	Prof. A. E. Tamošiūnas (Faculty of Medicine)
<i>Evaluation of Pathogenic Copy Number Variation in Etiopathology of Mental Retardation (PROGENET)</i>	2010–2011	Assoc. Prof. J. Kasnauskienė (Faculty of Medicine)
<i>Genomic Diversity of the Lithuanian Population and the Possibility for the Personalized Treatment of Coronary Heart Disease (LIGENKOR)</i>	2010–2011	Prof. Z. A. Kučinskienė (Faculty of Medicine)
<i>Food Allergy in Lithuanian Birth Cohort (first part)</i>	2009–2012	Dr. A. Žvirblienė (Institute of Biotechnology)
<i>Food Allergy in Lithuanian Birth Cohort (second part)</i>	2012–2014	Prof. R. Dubakienė (Faculty of Medicine)
<i>Mutation, in Monoamine Oxidase B Gene, Which is Associated with Parkinson's Disease, Influence for Pre-Mrna Splicing</i>	2010–2011	Dr. A. Kanopka (Institute of Biotechnology)
<i>Carbonic Anhydrases as Cancer Cell Markers</i>	2010–2011	Dr. D. Matulis (Institute of Biotechnology)
<i>Diagnostic and Prognostic Markers in Leukaemia</i>	2010–2011	Dr. R. Navakauskienė (Institute of Biochemistry)

<i>Prognostic Markers of Stress Kinase JNK Action for Targeted Therapy</i>	2010–2011	Dr. A. Kalvelytė ( <i>Institute of Biochemistry</i> )
<i>Colorectal Cancer: Study of Mortality, Disability and Quality of Life in Lithuania</i>	2011–2013	Prof. K. Strupas ( <i>Faculty of Medicine</i> )
<i>Multiplexed Molecular Biomarker Study for Leukemia</i>	2012–2014	Dr. R. Navakauskienė ( <i>Institute of Biochemistry</i> )
<i>Development of Complex Biomarkers for the Evaluation of Clinical Significance of Prostate Cancer</i>	2012–2014	Prof. J. R. Lazutka ( <i>Faculty of Natural Sciences</i> )
<i>Splicing Factors and miRNA as Diagnostic Biomarkers for Cancer of Digestive System</i>	2012–2014	Dr. A. Kanopka ( <i>Institute of Biotechnology</i> )
<i>Determination of the Diagnostic Potential of Carbonic Anhydrase hCA XII, Cancer Cell Marker</i>	2012–2014	Dr. D. Matulis ( <i>Institute of Biotechnology</i> )
<i>Molecular Mechanisms of the Pathogenesis of Alzheimer's Disease</i>	2012	Dr. G. Valinčius ( <i>Institute of Biochemistry</i> )

#### ECOSYSTEMS OF LITHUANIA: CLIMATE CHANGE AND IMPACT ON A PERSON

Project Title	Duration	Project Leader (Faculty)
<i>Variation of Life Cycles and Genetic Structure of Alien for Lithuania Aphid Species (Hemiptera, Sternorrhyncha: Aphididae)</i>	2010–2011	Prof. R. Rakauskas ( <i>Faculty of Natural Sciences</i> )
<i>Insects and Entomopathogens: Interactions Between Alien and Local Species, New Diagnostic Tools</i>	2010–2011	Prof. V. Būda ( <i>Faculty of Natural Sciences</i> )
<i>Palaeogeographical Changes in Lithuania throughout the Postglacial Period under the Baltic Sea and Land Interaction</i>	2010–2011	Prof. P. Šinkūnas ( <i>Faculty of Natural Sciences</i> )
<i>Genetic Diversity of Exotic Herbaceous Plant Species and Factors Influencing Their Spreading in Lithuania (No. LEK–10016)</i>	2010–2011	Prof. D. Žvingila ( <i>Faculty of Natural Sciences</i> )
<i>Native Tree Species and the Vulnerability of Their Populations, Habitat Change and the Forecast of Areal Changes Due to Climate Change</i>	2010–2011	Prof. E. Lekevičius ( <i>Faculty of Natural Sciences</i> )
<i>Local Plum Aphid (Hemiptera: Aphididae) Species Consortium: Impact of Invasive Species</i>	2012–2014	Prof. R. Rakauskas ( <i>Faculty of Natural Sciences</i> )

#### HEALTHY AND SAFE FOOD

Project Title	Duration	Project Leader (Faculty)
<i>Development of Novel Prebiotic Oligosaccharides Using Thermophilic Enzymes</i>	2011–2013	Dr. N. Kuisienė ( <i>Faculty of Natural Sciences</i> ) Prof. R. Meškys ( <i>Institute of Biochemistry</i> )

<i>Change of Bioactive Compounds in Underutilised Berry Species Depending on Genotype and Environment</i>	2011–2014	Dr. G. Slapšytė (Faculty of Natural Sciences)
<i>Interspecific Hybrids of Orchard Plant – A Novel Source of Anthocyanins</i>	2011–2014	Dr. R. Ražanskas (Institute of Biotechnology)
<i>The Management of Microgreens Nutritional Quality in Light Culture System</i>	2011–2014	Dr. A. Novičkovas (Institute of Applied Research)
<i>Detection of Bacterial Pathogens in the Food Chain by Molecular Techniques</i>	2012–2015	Dr. E. Sužiedėlienė (Faculty of Natural Sciences)
<i>Bee Products Enriched with Plant Components, the Composition and Properties</i>	2012–2015	Dr. B. Kurtinaitienė (Institute of Biochemistry)
<i>Innovative Technologies to Increase Microbial Safety and Quality of Raspberries and Strawberries</i>	2012–2015	Ž. Lukšienė (Institute of Applied Sciences)
<i>Expression Analysis of Anthocyanin Biosynthesis Genes in Horticultural Plants</i>	2012–2015	Dr. V. Kazanavičiūtė (Institute of Biotechnology)
<i>Investigation of Bioactive Substances in Food Matrices and Their Influence on Human Health</i>	2012–2015	Prof. A. Kaminskas (Faculty of Medicine)

### INDUSTRIAL BIOTECHNOLOGY DEVELOPMENT PROGRAMME

Project Title	Duration	Project Leader (Faculty)
<i>Development of Bioelectrocatalysis for Synthesis and Analysis (BIOISA)</i>	2008–2010	Prof. J. Barkauskas (Faculty of Chemistry) Dr. J. Razumienė (Institute of Biochemistry) Prof. F. Ivanauskas (Faculty of Mathematics and Informatics)
<i>Design and Evaluation of Ageing-Resistant Biodegradable Esters with Controllable Flammability</i>	2008–2010	Dr. B. Surinėnaitė (Institute of Biotechnology) Dr. V. Bendikienė (Faculty of Natural Sciences)
<i>Screening of New Biocatalyst by Analysis of Small Genomes and by Using Metagenomic Approaches (MetaGENAS)</i>	2008–2010	Prof. D. Čitavičius (Faculty of Natural Sciences) dr. R. Meškys (Institute of Biochemistry)
<i>Development of Anti-Cytolysin Monoclonal Antibodies Designed to Neutralize Toxic Cytolysins of the Pathogenic Bacteria</i>	2008–2010	Dr. E. Mištinienė (Institute of Biotechnology)
<i>Development of Diagnostic Tools for Merkel Cell Polyoma Virus</i>	2008–2010	Dr. R. Slibinskas (Institute of Biotechnology)
<i>Development of Completely Novel Approach for the Cosmetics (COSMETIZYME)</i>	2011–2013	Prof. D. Čitavičius (Faculty of Natural Sciences)
<i>Development of Innovative Biotechnology for Oil Base Lubricant Production (BIOLUBRICANT)</i>	2011–2013	Dr. I. Matijošytė (Institute of Biotechnology)

<i>The Development of Innovative Biocatalytic Stain Remover (FASTREMOVE)</i>	2012	Dr. I. Matijošytė ( <i>Institute of Biotechnology</i> )
<i>Novel Antifungal Lactic Acid Bacteria Bioproduct for Health of Cereal Grains in Organic Farming (BIOEKOTECH)</i>	2012	Dr. L. Kalėdienė ( <i>Faculty of Natural Science</i> )
<b>HIGH-TECH DEVELOPMENT PROGRAMME</b>		
<b>Project Title</b>	<b>Duration</b>	<b>Project Leader (Faculty)</b>
<i>The Design and Investigation of Suspensions for Tribosystems Containing Magnetic Particles</i>	2010	Assoc. Prof. H. Cesiulis ( <i>Faculty of Chemistry</i> )
<i>Implementation of the Information Infrastructure for Mobile and Wireless Services</i>	2010	Dr. L. Bukauskas ( <i>Faculty of Mathematics and Informatics</i> )
<i>Implementation of the Information Infrastructure for Mobile and Wireless Services</i>	2011	Dr. L. Bukauskas ( <i>Faculty of Mathematics and Informatics</i> )
<i>Four-wave Optical Parametric Amplifiers Based on Transparent Wide-Aperture Isotropic Media (FORTAS)</i>	2008–2010	Prof. A. Dubietis ( <i>Faculty of Physics</i> )
<i>Conical Waves Technologies (ConTeX)</i>	2008–2010	Dr. A. Matijošius ( <i>Faculty of Physics</i> )
<i>High Average Power Multi-Beam Pumped Femtosecond Optical Parametric Amplifier (INTEGRA)</i>	2009–2011	Prof. V. Smilgevičius ( <i>Faculty of Physics</i> )
<i>Multilaser Beam Technology for Surface and Thin Film Analysis (MULATAS 2)</i>	2008–2010	Dr. R. Tomašiūnas ( <i>Institute of Applied Research</i> )
<i>Development of Growth Technologies for GaBiAs Epilayers and Nanostructures for Fabrication of Optoelectronic Devices</i>	2009–2010	Prof. K. Jarašiūnas ( <i>Institute of Applied Research</i> )
<i>Detection of Pathogenic b-Amyloid Oligomers for Diagnostics in Alzheimer's Disease</i>	2008–2010	Dr. G. Valinčius ( <i>Institute of Biochemistry</i> ) Dr. A. Žvirblienė ( <i>Institute of Biotechnology</i> )
<i>Development of Yeast Expression System by Using Proteomic Approach and Gene Engineering</i>	2008–2010	Prof. K. Sasnauskas ( <i>Institute of Biotechnology</i> )
<i>Development of New Tools for Improved Laboratory Diagnosis of Human Papilloma Virus (HPV) Infection and HPV-Related Cancer (first part)</i>	2008–2010	Dr. A. Žvirblienė ( <i>Institute of Biotechnology</i> )
<i>Development of New Tools for Improved Laboratory Diagnosis of Human Papilloma Virus (HPV) Infection and HPV-Related Cancer (second part)</i>	2011	Dr. A. Žvirblienė ( <i>Institute of Biotechnology</i> )

<i>Methods and Software for Business Processes Modelling and Visualization</i>	2011–2013	Prof. A. Žilinskas ( <i>Institute of Mathematics and Informatics</i> )
<i>Essential Improvement in Group of Most Important Laser Elements by Enhancement of Optical Resistance and Optimization of Polishing and Metal Oxide Mixture Deposition Technologies (EIGULYS)</i>	2011–2013	Dr. A. Melninkaitis ( <i>Faculty of Physics</i> )
<i>Development and Implementation of Carrier-Envelope Phase Control in OPCPA Systems (PHASECONTROL)</i>	2011–2013	Dr. A. Varanavičius ( <i>Faculty of Physics</i> )
<i>Organic Optoelectronic Materials Targeted For Large Scale Synthesis (Org-Lascale)</i>	2011–2013	Prof. S. Juršėnas ( <i>Institute of Applied Research</i> )
<i>Optimization of Electrical, Optical and Thermal Characteristics of Solid-State Street Luminaire (TERRALED)</i>	2011–2013	Dr. P. Vitta ( <i>Institute of Applied Research</i> )
<i>Speech-To-Text Analysis and Translation of Medical Diagnostics</i>	2011–2013	Prof. A. Juozapavičius ( <i>Faculty of Mathematics and Informatics</i> )
<i>Creation of Physical Access Control Service System</i>	2011–2013	Dr. V. Jonkus ( <i>Faculty of Physics</i> )
<i>Development of Microfluidics Technology for Monodisperse Vesicles Production and Improved Drug Delivery</i>	2012	Dr. L. Mažutis ( <i>Institute of Biotechnology</i> )
<i>Development and Research of the Synchronously Pumped Femtosecond Optical Parametric Oscillator (MEGAOPO)</i>	2012	Dr. R. Grigonis ( <i>Faculty of Physics</i> )
<i>Bioactive Structured Scaffolds for Molecular Tissue Engineering</i>	2012	Prof. R. Gadonas ( <i>Faculty of Physics</i> )
<b>EUROSTARS</b>		
<b>Project Title</b>	<b>Duration</b>	<b>Project Leader (Faculty)</b>
<i>Production Effectiveness Navigator (PEN) (No. E!6232)</i>	2011–2014	Prof. G. Dzemyda ( <i>Institute of Mathematics and Informatics</i> )