

**Tbilisi State Medical University**  
**Current and Accomplished Scientific-Research Projects**  
**2020**

**Faculty of Medicine**

**Department of Allergology and Clinical Immunology**

**Head - Prof. Al. David Telia**

**1. Efficacy of Sublingual Immunotherapy in Allergic Asthma and Rhinitis. Retrospective, Replication, Systemic Meta-Analysis**

2018-2021

Research personnel:

Supervisor - Assoc. Prof. K. Machavariani, consultant - Prof. Al. David Telia. PhD. student Al. (Sandro) Telia

**2. Interrelation of Stress, Depression, Anxiety, Sleep Disorders and Allergic Skin Diseases in Adults**

2018-2021

Research personnel:

Supervisor - Assoc. Prof. K. Machavariani, consultant - Prof. Al. David Telia. PhD. student Zaza Telia

**Department of Child Neurology**

**Head - prof. Natela (Nana) Geladze**

**1. The Role of Heavy Metals in the Development of Various Neuromotor Disorders in Children and Adolescents**

2019-2021

Research personnel:

Supervisors - Prof. N. Geladze, Assoc. Prof. K. Gogberashvili. PhD. student A. Chochia

**2. Effect of Vitamin D on the Development of Musculo-Skeletal Apparatus and Nervous System in Children**

2019-2021

Research personnel:

Supervisors - Prof. N. Uberi, Assoc. Prof. S. Bakhtadze. PhD. Student N. Cholokava

**3. The Role of Pro-Inflammatory Cytokines in Various Forms of Epilepsy in Children**

2019-2021

Scientific-research funded by Shota Rustaveli National Science Foundation Grant

Research personnel:

Supervisor - Assoc. Prof. S. Bakhtadze, participants – Prof. N. Geladze, Assoc. Prof. N. Khachapuridze

**4. International, Multicentre, Double Blind, Randomized, Placebo-Controlled, Parallel-Group Study and Extended Observation (EP0034) to Investigate Efficacy and Safety of Lacosamide as Adjunctive Therapy in Subjects >1 Month to < 4 Years with Partial Epilepsy**

2020-2022

Scientific-research funded by foreign grant

Pharmaceutical company UCB, USA

Research personnel:

Supervisor - Assoc. Prof. S. Bakhtadze, participants - Prof. N. Geladze, N. Khachapuridze

**5. Study to Investigate Longterm Safety, Tolerability and Efficacy of Brivaracetam in Participants with Childhood and Juvenile Absence Epilepsy from 2 to 25 Years of Age**

2020-2022

Scientific-research funded by foreign grant

Pharmaceutical company UCB, USA

Research personnel:

Supervisor - Assoc. Prof. S. Bakhtadze

**6. International, Multicentre, Double-Blind, Randomized, Placebo-Controlled, Parallel-Group Study and Extended Observation (EP0034) to Investigate Efficacy and Safety of Lacosamide as adjunctive therapy in Subjects >1 Month to < 4 Years with Partial Epilepsy**

2015-2020

Scientific-research funded by foreign grant

Pharmaceutical company UCB, USA

Research personnel:

Supervisor - Assoc. Prof. S. Bakhtadze, participants - Prof. N. Geladze, N. Khachapuridze

## **7. International Study in Association with University College London (UCL)**

2019-2020

Scientific-research funded by foreign grant

Research personnel:

Principal investigator - Assoc. Prof. S. Bakhtadze

## **Department of Pediatric and Adolescent Medicine**

**Head- Prof. K. Pagava**

### **1. Familial Mediterranean Fever in Georgia**

2020-2022

Research personnel:

Supervisor- Prof. K. Pagava

Participants:

Association of Patients with FMF and Autoimmune Diseases

Georgia Center for Oncology Research

University of Graz (Austria). Klinisches Institut für Medizinische und Chemische Labordiagnostik

ViennaLab Diagnostics GmbH, Austria

Paediatric Rheumatology

International Trials Organisation (PRINTO). Eurofever Project.

### **2. Effect of Heavy Metals in Soil on Health of Children and Adolescents**

2019-2020

Research personnel:

Coparticipant - K. Pagava

**Department of Experimental and Preclinical Anatomy**  
**Head - Prof. Z. Kakabadze**

**1.Reconstruction of Antero-Lateral Abdominal Wall Defect with Biological 3D Membranes**

**PhDF-18-2192**

2018-2020

Scientific-research funded by Shota Rustaveli National Science Foundation Grant

Research personnel:

Supervisors – Prof. Z. Kakabadze, Prof. N. Lomidze. PhD. student D. Chakhunashvili

**Department of Cytopathology**

**Head – Prof. R. Beriashvili**

**1.Erazmus + Raising Research Capacity of Georgian HEIs through Developing R&D Units /HERD**

2019-2021

Research personnel:

Participant – Prof. R. Beriashvili

**Department of Pathophysiology**

**Head - Prof. N. Pavliashvili**

**1.Antihypertensive Effects and Mechanisms of Urotenzin II Receptor Antagonist Palosuran in Experimental Arterial Hypertension**

2019-2022

Research personnel:

Supervisor – Assoc. Prof. K. Gambashidze

**2.Pharmacological Characteristics and Therapeutic Efficacy of Un Phage in Experimental Model of Sepsis Caused by E. Coli**

2019-2022

Research personnel:

Supervisor – Assoc. Prof. K. Gambashidze

### **3.Experimental Study on Pharmacodynamics of Bioactive Microbial Products (IN-011, IN-012, IN-013)**

2019-2021

Research personnel:

Supervisor – Assoc. Prof. – K. Gambashidze

### **4.Mechanisms of Alterations in Antioxidative and Prooxidative Systems, Nitric oxide and Erythrocytes in Alloxan Induced Diabetes**

2017-2020

Research personnel:

Supervisors – Prof. T. Sanikidze, Assoc. Prof. N. Pavliashvili.

PhD. student K. Abuladze

## **Department of Forensic Medicine**

**Head - Prof. B. Kilasonia**

### **1.Morphology of Antemortem and Postmortem Fractured Bones**

**Forensic Medicine, Pathological Anatomy**

2017-2021

Research personnel:

Supervisors - Prof. B. Kilasonia, Prof. G. Chikhladze. PhD student M. Gonashvili

### **2.Expert Analysis of Electrical Injury**

2018-2021

Research personnel:

Supervisor - Assoc. Prof. R. Beriashvili. PhD student - D. Grigolia

**1. Prognostic Biomarkers for Successful Treatment of Rheumatoid Arthritis.**

**Medicine, Immunology, Rheumatology**

2020-2024

Research personnel:

Supervisor – Assoc. Prof. N. Kikodze, investigators - Prof. T. Chikovani, Assoc. Prof. N. Janikashvili, Principal Scientist M. Iobadze, Senior Scientist N. Kukuladze, PhD. Student N. Tsiskarishvili

**2. Integrative Study of Biomarkers and Genetic Mutations for the Development of Targeted Colorectal Cancer Therapy**

2020-2024

Research personnel:

Supervisor - Assoc. Prof. I. Pantsulaia, investigators - Prof. T. Chikovani, Asst. Prof. A. Aladashvili, Ts. Atamashvili, G. Kharebava, N. Chigvinadze, T. Elisashvili

**3. Plasticity of Splenic T Lymphocytes in Patients with Autoimmune Hematologic Disorders. Immunology, Hematology, Physiology**

PhD\_F\_17\_50

2017-2020

Scientific-research funded by Shota Rustaveli National Science Foundation Grant

Research personnel:

Supervisors Assoc. Prof. N. Janikashvili, Prof. I. Kvachadze

Investigators – PhD student S. Metreveli, Prof. T. Chikovani, Assoc. Prof. N. Kikodze, Principal Scientist M. Iobadze

**4. Plasticity of Splenic T Lymphocytes in Patients with B Cell Lymphoma.**

**Medicine, Immunology, Oncology, Hematology**

PhD\_F\_17\_20

2017-2020

Scientific-research funded by Shota Rustaveli National Science Foundation Grant

Research personnel:

Supervisors - Assoc.Prof. N. Janikashvili, Prof. G. Giorgobiani,

Investigators - PhD student N. Nanava, Prof. T. Chikovani, Assoc. Prof. N. Kikodze,

Principal Scientist M. Iobadze

### **5.Effects of Radiofrequency Ablation on Immune Response in Patients with Inoperable Pancreatic Cancer**

PhD\_F\_17\_46

2016-2020

Scientific-research funded by Shota Rustaveli National Science Foundation Grant

Research personnel:

Supervisors - Prof. T. Chikovani, Prof. M. Mizandari, Investigators - PhD student N. Toria, Assoc. Prof. N. Kikodze, Principal Scientist M. Iobadze, Assoc.Prof. N. Janikashvili,

Assoc. Prof. I Pantsulaia

**Department of Molecular and Medical Genetics**

**Head - Prof. T. Tkemaladze**

### **1.Genetic and Epigenetic Aspects of Inflammation. Epigenetic Modifiers as Therapeutic Target in Chronic Pain. Monogenic Disease Modifiers**

2016-2020

Research personnel:

Supervisors - Prof. T. Tkemaladze, Prof. E. Abzianidze. Investigators - Assoc. Prof. E. Kvaratskhelia, Assoc. Prof. K. Kankava, Asst. Prof. M. Zarandia, Ts. Giginishvili, B. Partskhaladze, PhD. Student T. Kvaratskhelia, PhD. Student N. Kraveishvili

**Department of Roentgenology**

**Head – Prof. O. Urushadze**

**1. Effects of Radiofrequency Ablation on Immune Response in Patients with Inoperable Pancreatic Cancer**

PhD\_F\_17\_46

2016-2020

Scientific-research funded by Shota Rustaveli National Science foundation grant

Research personnel:

Supervisors - Prof. T. Chikovani, Prof. M. Mizandari, investigators - PhD student N. Toria, Assoc. Prof. N. Kikodze, Principal Scientist M. Iobadze, Assoc. Prof. N. Janikashvili, Assoc. Prof. I Pantsulaia

**Department of Interventional Radiology**

**Head - Prof. M. Mizandari**

**1. Effects of Radiofrequency Ablation on Immune Response in Patients with Inoperable Pancreatic Cancer**

PhD\_F\_17\_46

2016-2020

Scientific-research funded by Shota Rustaveli National Science Foundation Grant

Research personnel:

Supervisors - Prof. T. Chikovani, Prof. M. Mizandari, investigators - PhD student N. Toria, Assoc. Prof. N. Kikodze, Principal Scientist M. Iobadze, Assoc. Prof. N. Janikashvili, Assoc. Prof. I Pantsulaia



**Department of Propedeutics of Neural Diseases and Topical Diagnosis**

**Head – Prof. M. Beridze**

**1.The role of some gene mutations in the development of amyotrophic lateral sclerosis in Georgian population and prospects of modification**

2020-2023

Scientific-research funded by foreign grant

University College London Quuen Square, Neurogenetics Laboratory Grant, UK

Research personnel:

Supervisors - Prof. M. Beridze, Prof. Henry Houlden, principal investigator - PhD. Student M. Kekenadze

**Department of Clinical Neurology**

**Head – Prof. M. Janelidze**

**1.Vascular Cognitive Impairment in Georgia.**

**Medicine, Health Sciences**

DI-18-428

2018-2021

Scientific-research funded by Shota Rustaveli National Science Foundation Grant

Research personnel:

Cosupervisor – Prof. M. janelidze, Investigator – A. Dzagnidze

**Department of Oncology**

**Head – prof. R. Gvamichava**

**1.Biochemical Parameters of Biorhythm Desynchronosis in Solid Cancer Patients**

2020-2021

Scientific-research funded by foreign grant

Research personnel:

Principal investigators - Assoc.Prof. A. Tavartkiladze, Prof. G. Simonia

**2.Isolation of Endemic Caucasian Bacteriophages to Study Bacteriolytic Activity against Multiresistant Hospital Bacteria (Acinetobacter baumannii-carbapenem-resistant, Klebsiella, Escherichia, Proteus, Pseudomonas - Pseudomonas aeruginosa-carbapenem-resistant)**

2020-2021

Scientific-research funded by foreign grant

Research personnel:

Principal investigators - Assoc.Prof. A. Tavartkiladze, R. Khutsishvili

**3.Study of chronobiological approaches and new biomarkers of biological rhythms in patients with complete desynchronization**

2020-2022

Scientific-research funded by foreign grant

Research personnel:

Principal investigators - Assoc.Prof. A. Tavartkiladze, Prof. G. Simonia, R. Khutsishvili

**4. Genetic Characteristics and Gene Polymorphism of Prostate Cancer in Georgian Population**

2018-2022

Scientific-research funded by foreign grant

Research personnel:

Principal investigators - Assoc.Prof. A. Tavartkiladze, Prof. G. Simonia, R. Khutsishvili

**5.Genetic Screening for Primary Hepatic Cancer in Patients Infected with HAVBand HC V**

2018-2022

Scientific-research funded by foreign grant

Research personnel:

Principal investigators - Assoc.Prof. A. Tavartkiladze, N. Okrostsvaridze, R. Khutsishvili

**Department of Internal Diseases #2**

**Head – Prof. A. kistauri**

**1.Echocardiographic Basis of Optimized Clinical Management of Patients with Metabolic Syndrome**

2018-2021

Research personnel:

Supervisor – Prof. A. Kistauri. PhD. Student D. Maisuradze

**2.The Role of proprotein Convertase Subtilizin Kexin 9 in the Pathogenesis and Clinical Aspects of Systemic Atherosclerosis**

2020-2023

Research personnel:

Supervisor – Prof. N. Kakauridze. PhD. Student N. Khunashvili

**3.The Role of Hpylori CagA in the Development and Complications of Gastroenterological and Ischemic Cardiac Diseases**

2020-2023

Research personnel:

Supervisor – Prof. N. Kakauridze. PhD. Student Kh. Gargulia

**Department of Internal Diseases #3**

**Head – prof. D. Gordeladze**

**1.Correction of Intestinal Flora in Patients with Chronic Renal Diseases Receiving Hemodialysis with the Purpose of Improving Quality of Life**

2018-2021

Research personnel:

Supervisors – Assoc. Prof. I. Chokhanelidze, Assoc. Prof. T. Kandashvili. PhD student

A. Shamanadze

**2.Effect of Modification of Intestinal Flora on Correcting Glycemia in Patients with Type 2 Diabetes**

2018-2021

Research personnel:

Supervisor –Assoc. Prof. T. Kandashvili. PhD student N. Katamadze

**3. Dynamics of Anemia, Inflammatory and Hemorrhagic Parameters in Patients with Gastric Cancer with or without Splenectomy in Postsurgical Period. Medicine, Internal Medicine**  
2018-2021

Research personnel:

Supervisor - Assoc. Prof. N. Narsia. PhD student E. Labadze

**4. European Commission COST Action**

**CA16207 – European Network for Problematic Usage of the Internet (PUI)**

**COST – Cooperation in Science and Technology – European Commission (Brussels, Belgium)**  
2017-2021

Scientific-research funded by foreign grant

Research personnel:

Participant – Z. Kirtava

**Department of Pediatric Surgery**

**Head – Prof. M. Buadze**

**1. Clinical Trial Protocol: DUR001-306, Study Title: A Phase 3, Multicenter, Open-Label, Randomized, Comparator Controlled Trial of the Safety and Efficacy of Dalbavancin versus Active Comparator in Pediatric Subjects with Acute Bacterial Skin and Skin Structure Infections**

2017-2020

Scientific-research funded by foreign grant

Research personnel:

Prof. M. Buadze, Assoc. Prof. A. Kutubidze, Asst. Prof. V. Talakvadze

**Department of Surgery #2**

**Head - Prof. B. Mosidze**

**1. Optimization of Anesthesia in Rectal Surgery.**

**Surgery, Anesthesiology, Reanimatology**

2018-2020

Research personnel:

Supervisors – Prof. B. Mosidze, S. Kajaia, D. Vardosanidze, R. Kvrivishvili. PhD. student  
I. Aghdgomelashvili

## **2. Optimization of Surgical Management for Complicated Colon Cancer.**

**General Surgery, Oncology**

2018-2020

Research personnel:

Supervisors – Assoc. Prof. Z. Demetrashvili, Prof. B. Mosidze. PhD student – G. Merabishvili

**Department of Surgery # 3**

**Head - Prof. G. Giorgobiani**

## **1. Plasticity of Splenic T lymphocytes in Patients with B cell Lymphoma**

2017-2020

Scientific-research funded by Shota Rustaveli National Science foundation grant

Research personnel:

Supervisors - Assoc. Prof. N. Janikashvili, Prof. G. Giorgobiani,

investigators - PhD student N. Nanava, Prof. T. Chikovani, Assoc. Prof. N. Kikodze,

Principal Scientist M. Iobadze

**Department of Clinical Skills and Multidisciplinary Simulation**

**Head – Prof. I. Manjavidze**

## **1. Simulations for Undergraduates to Improve Quality of Patient Safety and Care**

2020-2023

Scientific-research funded by foreign grant

**Department of Medical History and Bioethics**

**Head –Prof. R.Shengelia**

**1. Genetic History and Ethnogenesis of Georgia ( population genetics and molecular anthropology)**

2012-2022

Research personnel:

Supervisors -Prof. R. Shengelia, participants - N. Khelaia, E. Sanikidze, M. Gurgenidze, other Georgian and Foreign Colleagues

## **Faculty of Dentistry**

**Department of Odontology**

**Head - Prof. M. Mamaladze**

**1.Comparative Characterization of Antimicrobial Activity of Sicilian Sumac in the Management of Endodontic Diseases**

2019-2022

Research personnel:

Supervisor – Assoc. Prof. N. Nijaradze

## Faculty of Pharmacy

### Department of Pharmaceutical Technology

Head - Prof. A. Bakuridze

#### 1. Design, Technology and Biological Assessment of Anticancer in Situ Nanogel.

Medicine, Health Sciences

2019-2021

Scientific-research funded by Shota Rustaveli National Science Foundation Grant

Research personnel:

PhD. Student L. Ebralidze

#### 2. CARYS 19-363 New Phytobiotic as an Antibiotic Alternative for Poultry

2020-2021

Scientific-research funded by Shota Rustaveli National Science Foundation Grant

Research personnel:

Supervisor –Prof. A. Bakuridze, participant L. Bakuridze

### Department of Pharmaceutical and Toxicological Chemistry

Head - Prof. T. Murtazashvili

#### 1. CARYS 19-363 New Phytobiotic as an Antibiotic Alternative for Poultry

2020-2021

Scientific-research funded by Shota Rustaveli National Science foundation grant

Research personnel:

Supervisor –Prof. A. Bakuridze, participant Asst. Prof. K. Sivsivadze

### Department of Pharmacognozy

Head – Prof. D. Chinchradze

#### 1 Design, Technology and Biological Assessment of Anticancer in Situ Nanogel.

Medicine, Health Sciences

2019-2021

Scientific-research funded by Shota Rustaveli National Science foundation grant

Research personnel:

PhD. Student L.Ebraldze

## **2. CARYS 19-363 New Phytobiotic as an Antibiotic Alternative for Poultry**

2020-2021

Scientific-research funded by Shota Rustaveli National Science foundation grant

Research personnel:

Principal Investigator – Prof. D. Berashvili, Assoc. Prof. M. Jokhadze, Asst. Prof. S. Gokadze

## **Faculty of Physical Medicine and Rehabilitation**

**Department of physics, Biophysics, Biomechanics and Information Technologies**

**Head – prof. T. Sanikidze**

### **1. “PROGRESSIO“ – Pomeranean Medical University Development Project POWR.**

**03.05.00-00-Z090/17 (European Union)**

2018-2020

Scientific-research funded by foreign grant

Research personnel:

Lecturer – Prof. T. Sanikidze

### **2. “IMPRESIO“ – Pomeranean Medical University Development Project (European Union)**

2020-2022

Scientific-research funded by foreign grant

Research personnel:

Lecturer – Prof. T. Sanikidze

### **3. Risk Reduction of Chemical Pollution &quot;, AUF-MECR 2020-2021**

2019-2020



Scientific-research funded by foreign grant  
France

Research personnel:

Local Supervisor - Prof. T. Sanikidze

**Department of Traumatology and Orthopedics**

**Head – Prof. L. Chikvatia**

**1.High Wedge Open Tibial Osteotomy and Orthroscopic Chondroplasty as a Treatment for  
Knee Joint Osteoarthritis**

2019-2021

Research personnel:

Prof. T. Nozadze. PhD student - I. Khabeishvili

**TSMU Bakhutashvili Institute of Medical Biotechnology**

**Head – Director Assoc. Prof. I. Pantsulaia**

**1.Prognostic Biomarkers for Successful Treatment of Rheumatoid Arthritis.**

**Medicine, immunology, rheumatology**

2020-2025

Scientific research funded by state research support program

Research personnel:

Supervisors – Assoc. Prof. N. Kikodze, investigators – Principal Scientist M. Iobadze, Senior Scientist N. Kukuladze , R. Aprasidze, M. Lemonjava

**2.Integrative Study of Biomarkers and Genetic Mutations for the Development of Targeted Colorectal Cancer Therapy**  
**Medicine, Immunology, Oncology**

2020-2025

Scientific research funded by state research support program

Research personnel:

Supervisors –Assoc. Prof I. Pantsulaia, Senior Scientist A. Aladashvili, Ts. Atamashvili,  
Principal Investigator – G. Kharebava, N. Chigvinadze, T. Elisashvili

**3. Genetic and Epigenetic Modifiers of Immune Response in Cystic Fibrosis**

2020-2025

Scientific research funded by state research support program

Research personnel:

Supervisors -E. Kvaratskhelia, Scientist E. Maisuradze, Senior Scientist M. Gagua, M.  
kamkamidze

**4.Isolation of Anticancer Compounds from Plants, Analysis and Study of Their Medical Effects.**

**Medical and Health Sciences, Medical Biotechnology, Health Related Biotechnologies**

2020-2025

Scientific research funded by state research support program

Research personnel:

Supervisor - I. Chkhikvishvili, investigators – N. Gogia, M. esaiashvili, T. Meladze,  
G.Sharashenidze

**5.Thyroid Dysfunction as a Likely Bioindicator of the Environmental Pollution by Heavy Metals. Medicine**

2020-2025

Scientific research funded by state research support program

Research personnel:

Supervisors – Scientist I. Kharischarishvili, Principal Scientist N.Dabrundashvili, Scientist  
Z.Kereselidze, N. Khandratiani

**6.Salt-Sensitive Essential Hypertension and Metabolic Syndrome**

2020-2025

Scientific research funded by state research support program Research personnel:  
Supervisor -I. Andronikashvili. Senior Scientist D. Labartkava

N. Pantsulaia, S.Tatishvili

### **7.Isolation of Bioactive Substances from Human Placenta and Their Study**

2020-2025

Scientific research funded by state research support program

Research personnel:

Supervisors –Principal Scientis S. Kupradze, investigators – I. Gvelesiani, Ts. Gagnidze,  
E. Vorobiova, N. Mirianashvili

### **8.Prevention and Treatment Qualities of a new Drug in the Experimental Model of Complications caused by Diabetes Mellitus**

2020-2025

Scientific research funded by state research support program

Research personnel:

Supervisor – M. Gagnidze, investigators - M. machavariani, M. Enukidze, Z. Bukia

### **9.Plasticity of splenic T lymphocytes in patients with autoimmune hematologic disorders PhD\_F\_17\_50**

**Medicine, immunology, Hematology, Physiology**

2017-2020

Scientific-research funded by Shota Rustaveli National Science Foundation grant

Research personnel:

Supervisors - Assoc. Prof. N. Janikashvili, Prof. I. Kvachadze, Investigators – PhD. Student  
S. Metreveli, Assoc. Prof N. Kikodze, Principal Scientist M. Iobadze

### **10.Plasticity of Splenic T Lymphocytes in Patients with B Cell Lymphoma**

**Medicine, immunology, Oncology, Hematology**

**PhD\_F\_17\_20**

2017-2020

Scientific-research funded by Shota Rustaveli National Science foundation grant

Research personnel:

Supervisors - Assoc. Prof. N. Janikashvili, Prof. G. Giorgobiani, investigators – PhD. Student  
N. Nanava, Assoc. Prof N. Kikodze, Principal Scientist M. Iobadze

**11. Effects of Radiofrequency Ablation on Immune Response in Patients with Inoperable Pancreatic Cancer**

**PhD\_F\_17\_46**

**Medicine, Immunology, intervention Radiology**

2016-2020

Scientific-research funded by Shota Rustaveli National Science foundation grant

Research personnel:

Supervisors – Prof. T. Chikovani, Prof. M. Mizandariძს, investigators – PhD. Student

N.Toria , Assoc. Prof. N. Kikodze, Principal Scientist M. Iobadze, Assoc. Prof. N. Janikashvili,

Assoc. Prof. I. Pantsulaia

**TSMU Kutateladze Institute of Pharmacochimistry**

**Head – Acting Director Assoc. Prof. L. Mskhiladze**

**1. Sustainable Development of Phytochemical Science**

2014-2023

Scientific research funded by state research support program

Research personnel:

Institute of Pharmacochimistry

**2. Division of Lipids and Anthraquinones**

**Screening Plants Growing in Georgia for Lipids, Anthraquinones and Bioactive Compounds with the Purpose of Application in Pharmaceutical Practice, Cosmetics and Food Processing**

2020

Scientific research funded by state research support program

Research personnel:

Principal Scientist B. Kikalishvili, Senior Scientist D. Turabelidze, Senior Scientist

Ts. Sulakvelidze, Scientist M. Malania

### **3. Department of Phytochemistry, Division of Alkaloids**

**Screening Plants growing in or Introduced to Georgia *Vinca rosea L. (Family Apocynaceae)*, *Delphinium flexuosum Bieb (Family Helleboraceae)*, *Peganum harmala L. (Family Peganaceae)*, *Mahonia aquifolium (Pursh.) Nutt. (Family Berberidaceae)* for Bioactive Alkaloids**

2020

Scientific research funded by state research support program

Research personnel:

Supervisors -Prof. V. Vachnadze, Principal Scientist N. Vachnadze, Senior Scientist L. Kintsurashvili, Scientist T. Suladze

### **4. Department of Phytochemistry, Division of Steroid Compounds**

**Study on Significant Raw Bioactive Substance Containing Plants**

2014-2023

Scientific research funded by state research support program

Research personnel:

Principal Scientist E. Kemertelidze, Senior Scientist I. Gvazava, Senior Scientist M. Benidze, N. Sakvarelidze

### **5. Phytochemical Department, Division of Terpenes**

**I. Phytochemical Study on Terpene Containing Plants Growing and Cultivated in Georgia for Therapeutic and Prophylactic Uses**

**II. Phytochemical (Pharmacognostic) and Biological (Pharmacological, Toxicological) Study on Terpene Containing Plants Growing in Georgia for Detection of Bioactive Substances**

01.2020-01.2021

Scientific research funded by state research support program

Research personnel:

Senior Scientist Z. Kemoklidze, PhD. Students G. Moshiasvili, T. Korkotadze

### **6. Chemistry of Bioactive Natural Compounds.**

**Sustainable Development of Phytochemical Science**

**Screening Species of Georgian Flora for Bioactive Compounds with the Purpose of Therapeutic Product Development**

2014-2023

Scientific research funded by state research support program

Research personnel:

Supervisor – M. Alania, investigators – Senior Scientist, T. Saghareishvili, Senior Scientist K. Shalashvili, Scientist N. Kavtaradze, Scientist M. Sutishvili

## **7. Pharmacobotany**

**Morpho- Systemic, Natural Resources Biology and Anatomical Peculiarities of Some Promising Treatment Plants Growing in Georgia**

2014-2023

Scientific research funded by state research support program

Research personnel:

Principal Scientist K. Mchedlidze, Senior Scientist M. Churadze, Scientist J. Aneli, E. Lomidze, N. Aleksidze. G. Chabashvili

## **8 Enzymology, Biochemistry**

**Enzyme Complex Stem Bromelain Containing Stabilized Product Development with Chemical Modification**

2020

Scientific research funded by state research support program

Research personnel:

Principal Scientist G. Erkomaishvili, Senior Scientist L. Nadirashvili, PhD student T. Korinteli

## **9. Division of Plant Biopolymers**

**Screening *Borago officinalis* Stem High Molecular fractions for Bioactive Polymers Poly [3-(3,4-Dihydroxyphenyl)-glycine]. Screening Low Molecular Fractions of Several Species of *Family Boraginaceae* for compounds involved in the Biosynthesis of Phenolic Biopolymers. Synthesis of Caffeic Acid Derivatives and Study of their Antimicrobial Activity**

2020

Scientific research funded by state research support program

Research personnel:

Principal Scientist V. Barbakadze, Senior Scientist I. Gogilashvili, Scientist L. Amiranashvili, Senior Scientist M. Merlani

#### **10. Division of Chemical Modification of Natural Compounds**

##### **Sustainable Development of Phytochemical Science**

**Potentially Bioactive Compound Synthesis and pharmacological Study from Tigonins obtained from *Yucca Gloriosa*. Some New Steroid Triazole Synthesis**

2014-2023

Scientific research funded by state research support program

Research personnel:

Principal Scientist N. Nadaraia, Senior Scientist M. Kakhabrshvili, Scientist N. Barbakadze

#### **11. Department of Pharmaceutical Analysis and Standardization**

**Analysis of Bioactive Substances, Enriched Fractions and Extracts, Isolation of Individual Substances, Updating Analytical and Standardization Methods for Drugs Developed at the Institute of Pharmacochemistry**

2014-2023

Scientific research funded by state research support program

Research personnel:

Principal Scientist M. Getia, Scientist G. Moshiashvili

#### **12. Pharmacy, Pharmaceutical Technology, Nanotechnology**

**Developing New Effective Treatment Dosage Forms and Laboratory Technologies with Bioactive Organic and Inorganic Substances**

2014-2023

Scientific research funded by state research support program

Research personnel:

Supervisor - Principal Scientist G. tsagareishvili, investigators - Senior Scientist L. Wiklauri, Scientist D. Lagazidze, Scientist M. Orjonikidze

#### **13. Division of Bioactive Additives and Cosmetics**

##### **Bioactive Additives and Cosmetics**

**Developing Dermatological Cream and Powder Dosage Forms with Bioactive Substances of Georgian Flora, Mineral Waters and Treatment Muds**

2020-2021

Scientific research funded by state research support program

Research personnel:

Supervisor – Principal Scientist P. Yavich, Investigators - Senior Scientist M. Kakhetelidze, ,  
Scientist L. Churadze

**14. Screening for Bioactivity of Natural, Chemically Modified and Synthetic Compounds and their Preclinical Study**

2014-2023

Scientific research funded by state research support program

Research personnel:

Principal Scientist K. Mulikjanian, Senior Scientist M. Sulakvelidze, Scientist N. Gogitidze,  
Scientist N. Mushkiashvili, Scientist J. Novikova

**15. New Phytobiotic as an antibiotic Alternative for Poultry  
CARYS-19-363**

2020-2021

Scientific-research funded by Shota Rustaveli National Science Foundation Grant

Research personnel:

Principal Scientist K. Mulikjanian

**16. Design, Technology and Biological Assessment of Anticancer in Situ Nanogel.  
Medicine, health Sciences FR-18-7943**

2019-2020

Scientific-research funded by Shota Rustaveli National Science foundation grant

Research personnel:

Prof. Z. Kakabadze, Prof. A. Bakuridze, Senior Scientist V. Mshvildadze

**17. Microdistribution of Several Species in Sagene Region for the Assessment for Small Scale  
Forests**

**Research Development Fund, University of Quebec** University of Quebec

2020-2021

Scientific research funded by foreign grant

Research personnel:

S. Rosi, V. Mshvildadze, J. Lego