



**Ministry of Education and Science of Georgia**

**Shota Rustaveli National Science Foundation**

# Background

- Reforms in national S&T being conducted since 2004 were generally focused on following priority fields:



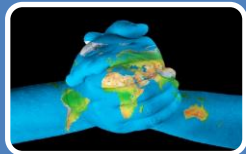
to create competitive environment for research funding



to provide independence to research institutions



to harmonize research with higher education



to step forward from isolation towards international cooperation

- Before reforms Georgian Science and Technology system was mainly represented by National Academy of Sciences (with 66 research institutions), Academy of Agrarian Sciences (with 12 institutions) and 7 State universities.

# Background

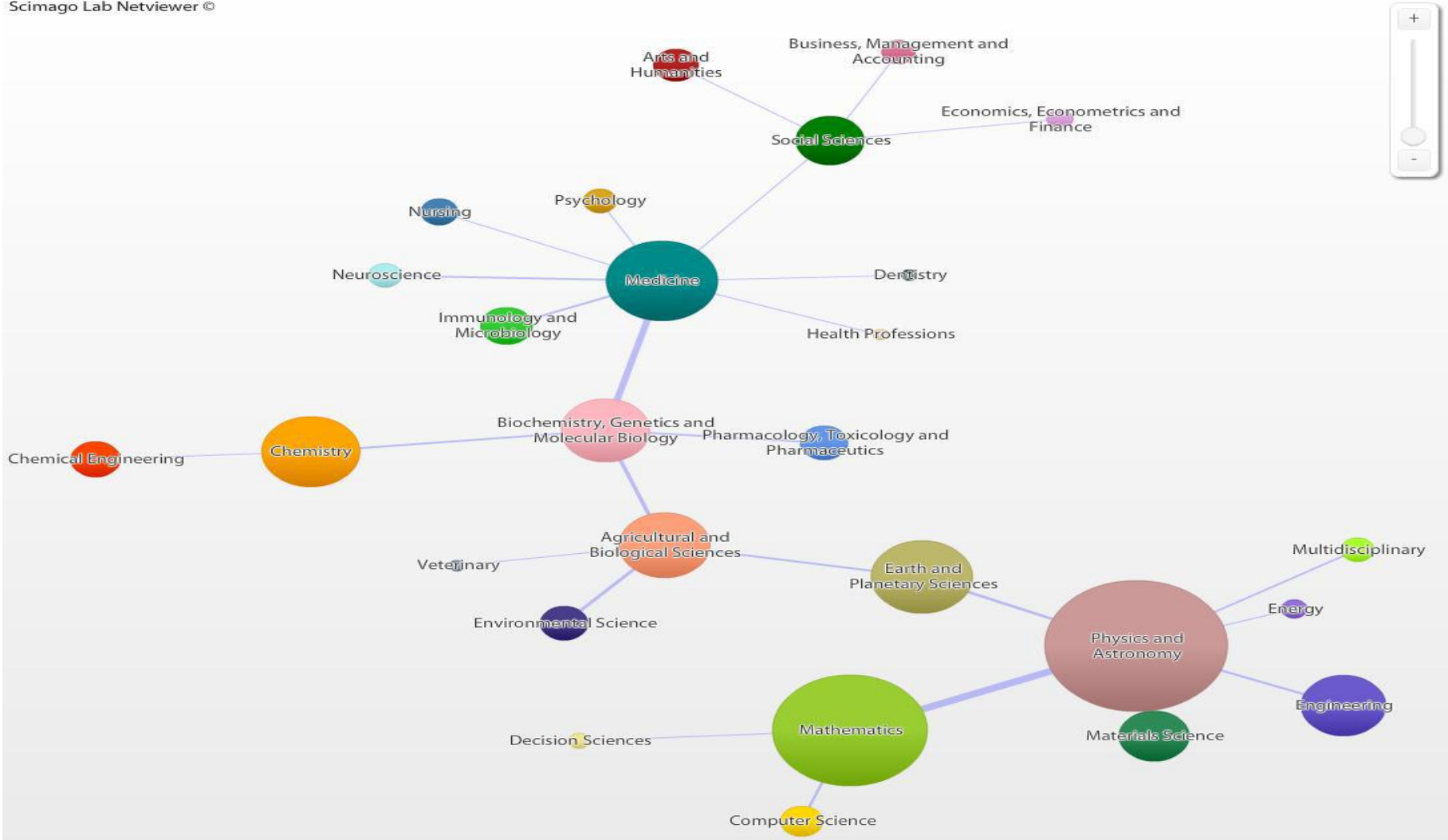
## **As a result of reforms:**

1. Georgian National Science Foundation was established in July 2005;
2. In 2005 the research institutions were brought out from the centralized management system of Academies and given the status – LEPL. Consequently, the institutes had to make a choice between following options: (A) continue activities independently or join efforts with institutions of similar profile, (B) become integral part of universities.
3. Nowadays around 80% of institutions are under the auspices of State universities, some of them merged each other and established research centers, a few institutes have kept independent status or were closed down.
4. Agreements on R&D cooperation with foreign funding entities have been concluded and cost-sharing mechanism has been widely introduced.

# Background

## Areas of science in which Georgia has the most and the best scientific out put

Scimago Lab Netviewer ©



Source: SCImago, April, 2014.

# Research Structure

- ❖ Legislative Control over S&T related activities of executive government as well as the power of legislative initiative are exercised by the **Parliamentary Committee for Education, Science and Culture**.
- ❖ **Research and Innovation Board** was created at Prime Minister's office in February 2015
- ❖ Policy making and funding functions in Georgia are mainly concentrated in the **Ministry of Education and Science and Shota Rustaveli National Science Foundation (SRNSF)**.
- ❖ Key research performers are represented by **public universities, S&T institutes (legal entities of public law) and some private institutes** are focused on applied/project activities. Besides, some **20-25 non-governmental organisations** are involved in political analyses, socio-economic studies, statistical observations, eco-monitoring.
- ❖ Georgia's **Innovation and Technology Agency** was established in February 2014, which operates under the **Ministry of Economy and Sustainable Development of Georgia**. The Agency is assigned to coordinate and mediate an important role in the country in terms of innovation and technology development.
- ❖ Under the "Law on National Academy of Sciences", **Georgian National Academy of Sciences** is the advisory body and has a role in setting out national R&D priorities.

# Research Funding System

Majority of funds from the State budget are allocated by the Ministry of Education and Science in the form of:



Core funding of public universities/research institutions (around 14,5 mln GEL)



Competitive grants (via Shota Rustaveli National Science Foundation) (around 22 mln GEL)



Besides, the Ministry provides financial support to Academy of Sciences (3,6 mln GEL) and Academy of Agrarian Sciences (0,6 mln GEL)

- Funding from private sector is very limited and of case-to-case character.
- Average annual funding for R&D is around 57 mln GEL which made 0.2% of the country's GDP

# International Cooperation (Science & Technology)

Co-operation of Georgia with other countries is carried out mainly through the Bilateral Programmes of SRNSF with foreign counterpart organizations as well as by direct contacts of the universities and research organisations with their profile partner organisations.

- **Co-operation with EU Countries and the United States**

In general, bilateral and multilateral co-operation with EU Countries and United States is realized in the frame of EU FPs and bilateral programmes (e.g. with CNR (Italy), CNRS (France), Juelich Center (Germany), CRDF (United States), STCU, etc.

There are also examples of scientific cooperation with EU-member states and associated countries on the level of individual initiative of scientists and research organisations.

# International Cooperation (SRNSF's joint programmes)



**“Targeted R&D Initiatives Programme”, partner STCU**

thematic priorities: A. Biotechnologies and Life Sciences; B. New Materials and Nanotechnologies; C. Information and Communication Technologies.



**“International Exchange Programme”, partner CNRS (France)** thematic priorities: A. Mathematics, B. Physics, C. Life sciences.



**Programme “International Research Group”, partner CNRS** thematic priority: Geosciences.



**“Science and Technology Entrepreneurship Programme” and Other Joint Programmes in Biomedical Research, partner CRDF (USA)**

thematic priorities: A. ICT, B. Biotechnologies, C. Agrarian Sciences, D. New materials, E. Energy, F. Health + Biomedicine.



**“International Exchange Programme”, partner CNR (Italy)**

All thematic priorities.



**“Joint Research and Education Programme”, partner Forschungszentrum Jülich (Germany)**

thematic priorities: Mathematics; Information Technologies; Natural Sciences; Engineering Sciences; Life Science and Health.



# International Cooperation



Georgia en route to Associated Membership to Horizon2020

Further co-operations with EU will be held through the H2020 and ENPI as well as on the basis of bilateral joint activities with Foreign S&T institutes and foundations.



Currently SRNSF is preparing a background for widening bilateral cooperation (jointly funded activities, programmes on exchanging experts and researchers, introduction of best practices, etc.) with EU, EaP, United States, Japan, etc.

# Higher Education and Science



State Funding program for 21 specialization ( about 8500 granted students in 2014)



State grants for students of Bachelor and Master educational program



Social programs for students of Bachelor and Master educational program (including funding for Disaster-affected students, for effected students living near dividing line etc.)



State scholarship program (Doubled number of fellows in 2014)



Funding of study and research programs for Masters



State grants for PhD

# Higher Education and Science



Summer and Winter schools



Library Development Program



Infrastructure development program



Increased autonomy and financial independence of Universities



Easier International Student Mobility



Internationalization of Authorization and accreditation process



Development of scientific and scientific-educational potential of the higher education institutions  
(42 research projects were evaluated)

# International Cooperation



## San Diego State University engineering school

30 million US dollars investment

Bachelor's degree programs in electrical engineering, computer science, chemistry (biochemistry studies) and Computer Engineering

Graduates will receive San Diego State University and Georgia State University Diplomas

## International Scientific Cooperation

Access to the international scientific bases

EU research and innovation program HORIZON 2020

Jülich Research Center

CERN European Organization for Nuclear Research

High Energy Accelerator Research Organization KEK

Cooperation with foreign partners CNRS, STCU, CRDF

# SRNSF Funding for Fundamental & Applied Research 2011-2013

| Program  | Number of research projects financed by SRNSF | Grant amount in GEL |
|--|---|---------------------|
| Applied Research (AR)  | 90  | 17,413,974          |
| Fundamental Research (FR)  | 215   | 27,707,555          |
| Research projects with participation of Georgian scientists living abroad (DI) | 45  | 6,319,790           |
| Georgian Material and Cultural Heritage Research projects (HE)                 | 6   | 1,755,201           |
| <b>TOTAL</b>   | <b>356</b>                                    | <b>53,196,520</b>   |

# Current Development



From January 2015 the Ministry of Education and Science increased funding of Research Institutions and salaries for researchers were increased by 2.5.



Ministry of Education and Science initiated changes in the Law of Higher Education and established the status of **researcher** from Spring 2015.

# Georgia Elsevier Partnership



- Aim: support the development of R&D in Georgia



- By access to electronic content



- By providing insights into research performance around the globe



- By increasing visibility of Georgian journals on Science Direct



- By providing service to researcher community



- By supporting Shota Rustaveli National Science Foundation in their daily tasks



- By providing access to funding opportunities around the globe

# Georgia Elsevier Partnership



- Access for 21 public research institutions to

- Science Direct Freedom collection (almost 2 000 journals, 5 years back)

- Scopus (the biggest citation and abstract database in the world)

- service to researcher community

- Trainings at institutions (9 in 2014)

- Author and editor workshops

- Facilitating R&D strategy discussions (the forum)





**Thank you**