
TOWARDS A MORE INTENSE COOPERATION BETWEEN EXCELLENT HUNGARIAN AND NORWEGIAN RESEARCH TEAMS

József Pálincás
President

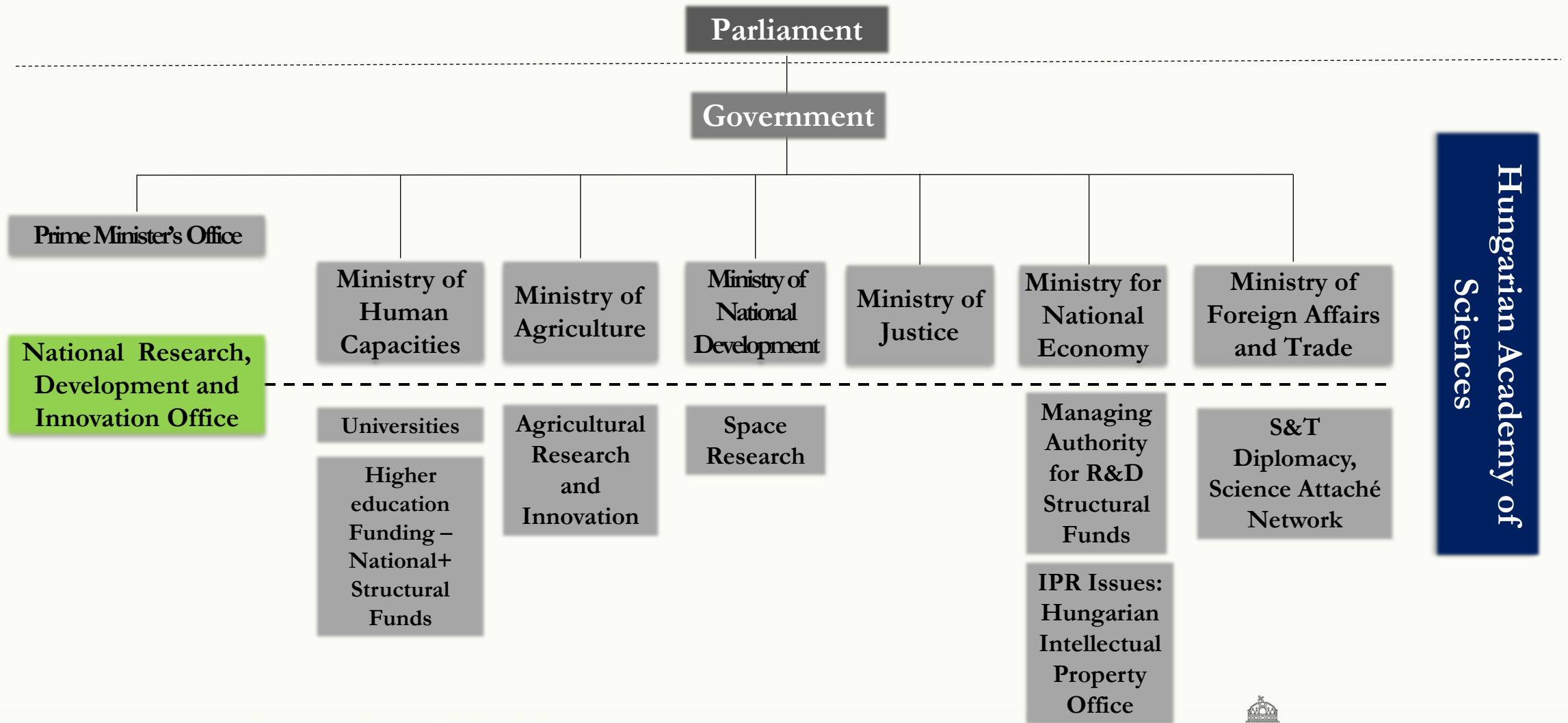
National Research, Development and Innovation Office of Hungary

MOMENTUM OF INNOVATION



NATIONAL RESEARCH, DEVELOPMENT
AND INNOVATION OFFICE
HUNGARY

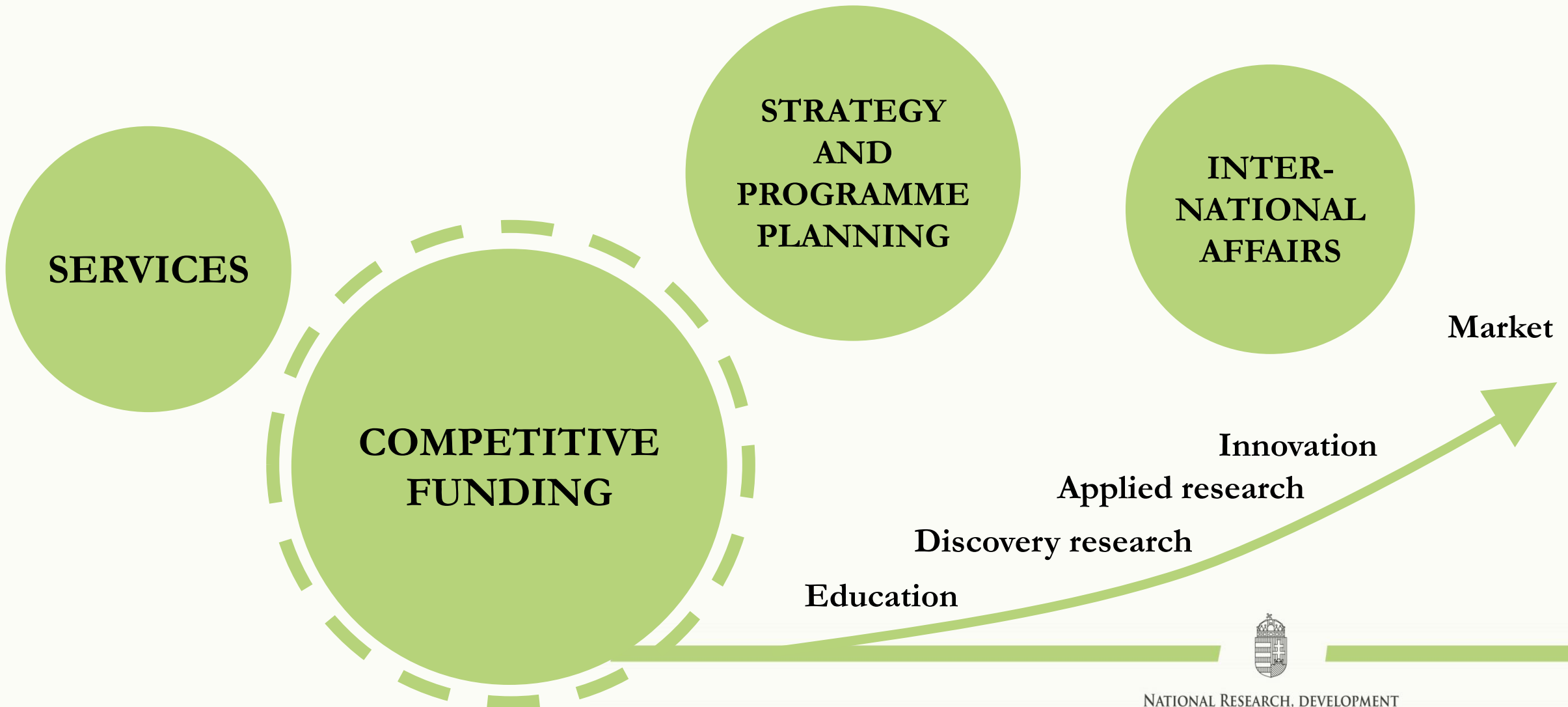
Governmental Structure of RDI in Hungary



MOMENTUM OF INNOVATION



National Research, Development and Innovation Office the central governmental entity for RDI in Hungary



Research Universities in Hungary



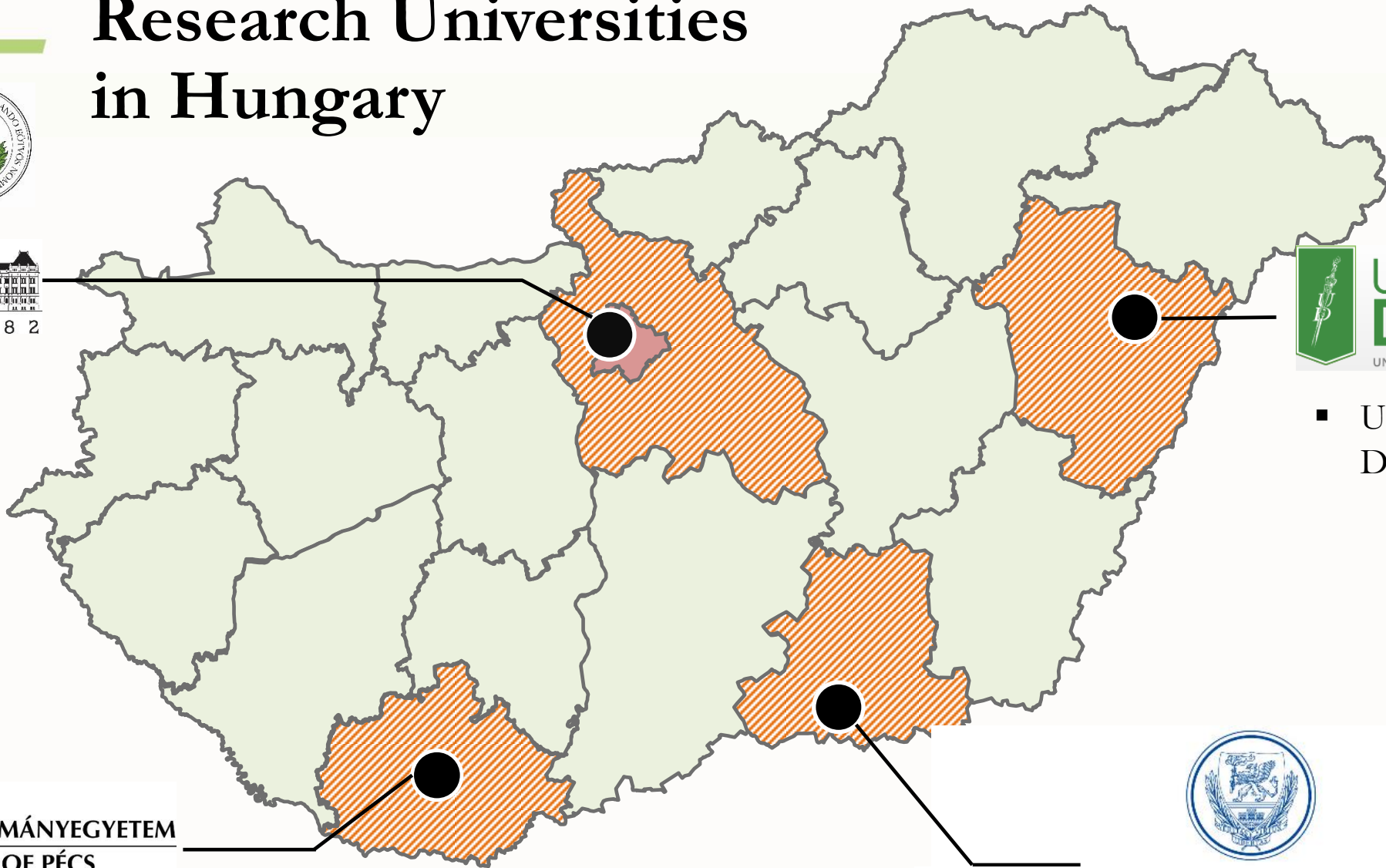
M Ű E G Y E T E M 1 7 8 2

- BUDAPEST
UNIVERSITY OF
TECHNOLOGY
AND ECONOMICS
- EÖTVÖS LORÁND
UNIVERSITY
- SEMMELWEIS
UNIVERSITY



PÉCSI TUDOMÁNYEGYETEM
UNIVERSITY OF PÉCS

- UNIVERSITY OF PÉCS



- UNIVERSITY OF
DEBRECEN



- UNIVERSITY OF SZEGED

BUDAPEST

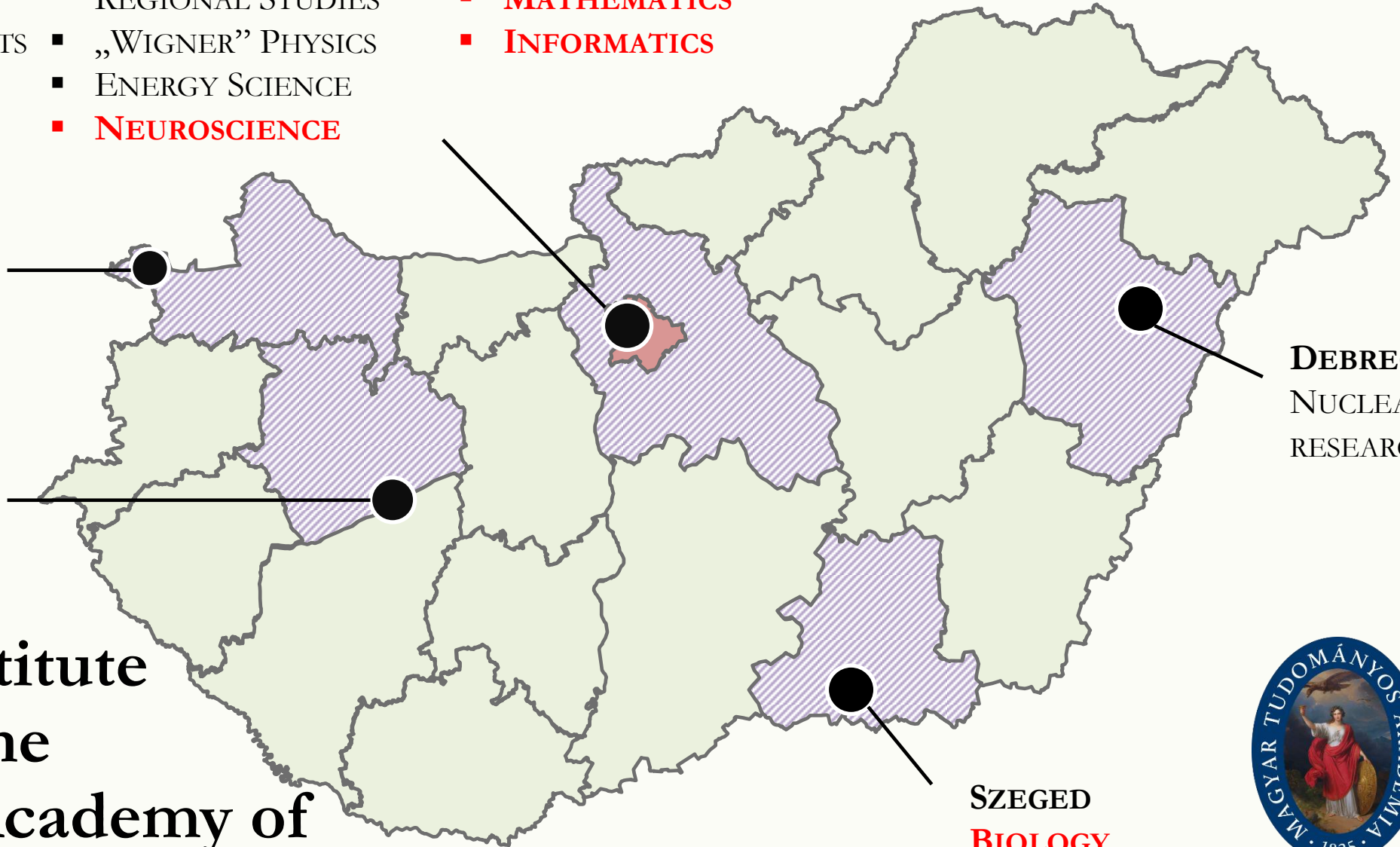
- **NATURAL SCIENCES**
- SOCIAL SCIENCES
- HUMANITIES AND ARTS
- AGRICULTURAL SCIENCES
- ECONOMY AND REGIONAL STUDIES
- „WIGNER” PHYSICS
- ENERGY SCIENCE
- **NEUROSCIENCE**
- LINGUISTICS
- **MATHEMATICS**
- **INFORMATICS**

SOPRON
ASTRONOMY
AND EARTH
SCIENCE

TIHANY
ECOLOGY

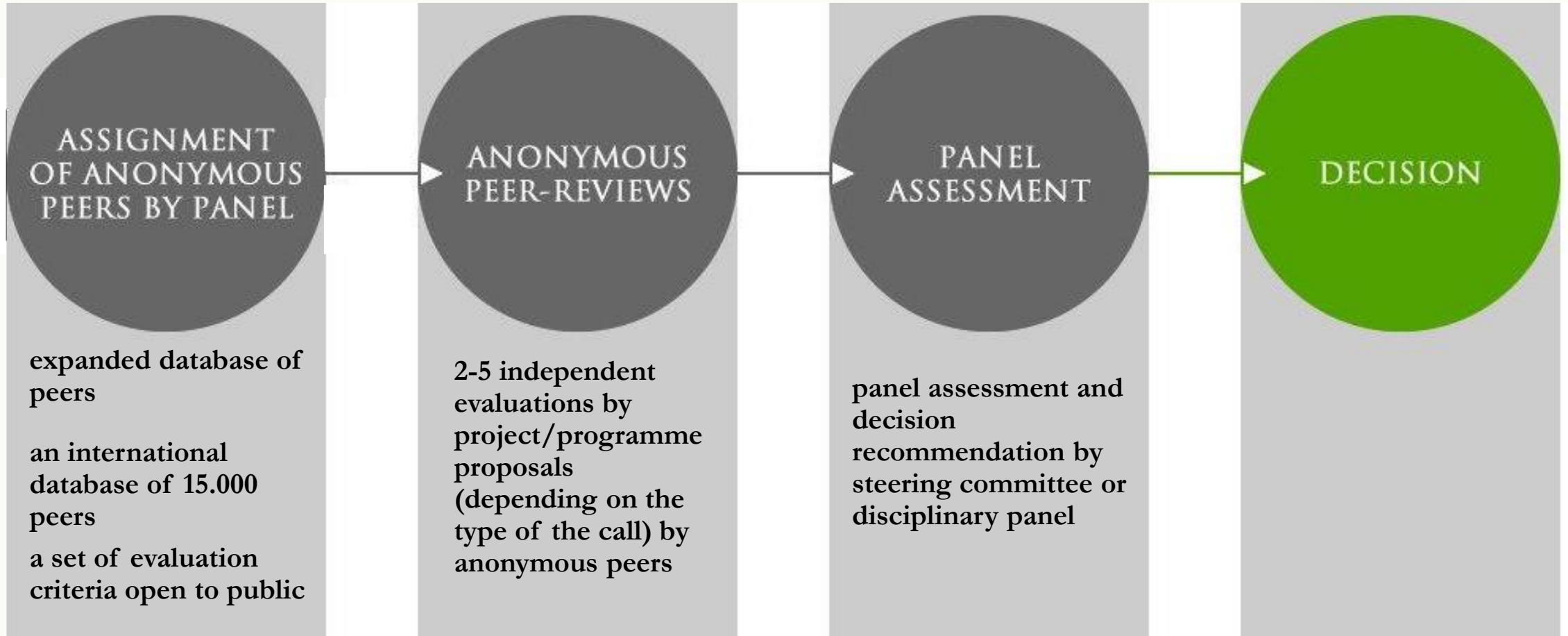
DEBRECEN
NUCLEAR
RESEARCH

SZEGED
BIOLOGY



Research institute network of the Hungarian Academy of Sciences (HAS)

Evaluation system of RDI projects



COMPREHENSIVE, MULTI-STAGE EVALUATION PROCESS
TRANSPARENT ASSESSMENT PROCEDURES AND CLEAR SET OF
CRITERIA



Knowledge Transfer

R&D competitiveness and excellence cooperation programme

312,2 M €

National Competitiveness and Excellence Programme

90,1 M €

Research infrastructure development of Higher Education and Industry Cooperation Centres

89,5 M €

R&D competitiveness and excellence cooperation programme - Central Hungary...

5,8 M €

Research Infrastructures

Excellence of Strategic R&D centres

214,2 M €

Excellence of Strategic R&D centres - Central Hungary
Research infrastructure

13,4 M €

Discovery research and Postdoctoral Programmes

Postdoctoral excellence programme

10,0 M €

“Frontline” – Research Excellence Programme

10,0 M €

Support of research teams with internationally prominent achievements...

3,3 M €

International RDI Cooperation

National support for European Research Council (ERC) programme entries...

1,3 M €

Calls to promote excellence in the portfolio of the NRDI Fund (2015-2017)

0,0 M €

100,0 M €

200,0 M €

300,0 M €

NRDI Office to support scientific excellence in exploratory research

EXCELLENCE PROGRAMMES PROMOTING THE INTERNATIONAL COMPETITIVENESS OF DISCOVERY RESEARCH	ERC	KKP_17	KH_17
	Funding programmes promoting access to European Research Council (ERC) programmes	“Frontline” Research Excellence Programme	Funding of research groups whose outstanding achievements have a significant international impact on scientific forums with major visibility
	BUDGET: HUF 0.45 BN	BUDGET: HUF 3 BN	BUDGET: HUF 1 BN

RESEARCHERS’ THEMATIC APPLICATIONS PROGRAMMES, POSTDOCTORAL PROGRAMMES PROMOTING DISCOVERY RESEARCH	PD_17	FK_17	K_17	NN, ANN, SNN 17
	Postdoctoral excellence programme	Calls for thematic applications initiated by young researchers	Calls for thematic applications initiated by researchers	Calls for thematic applications based on international cooperation
	BUDGET: HUF 1.5 BN	BUDGET: HUF 3 BN	BUDGET: HUF 6.5 BN	BUDGET: HUF 6.5 BN

MOMENTUM OF INNOVATION



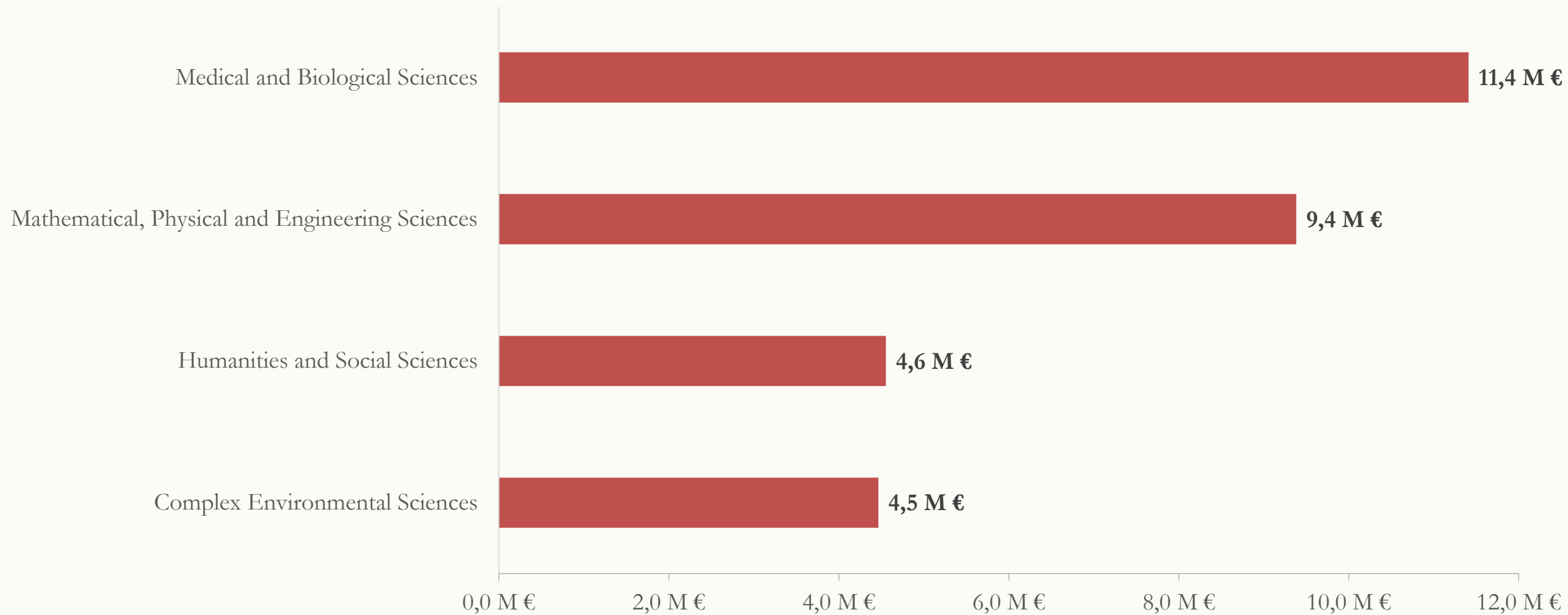
Frontline research excellence programme (KKP_17)

support to world-class researchers in their most dynamic and creative career phases pioneering their field of science in the forefront of international scientific research

funding of nearly EUR 1 million per winning applicants for a period of five years

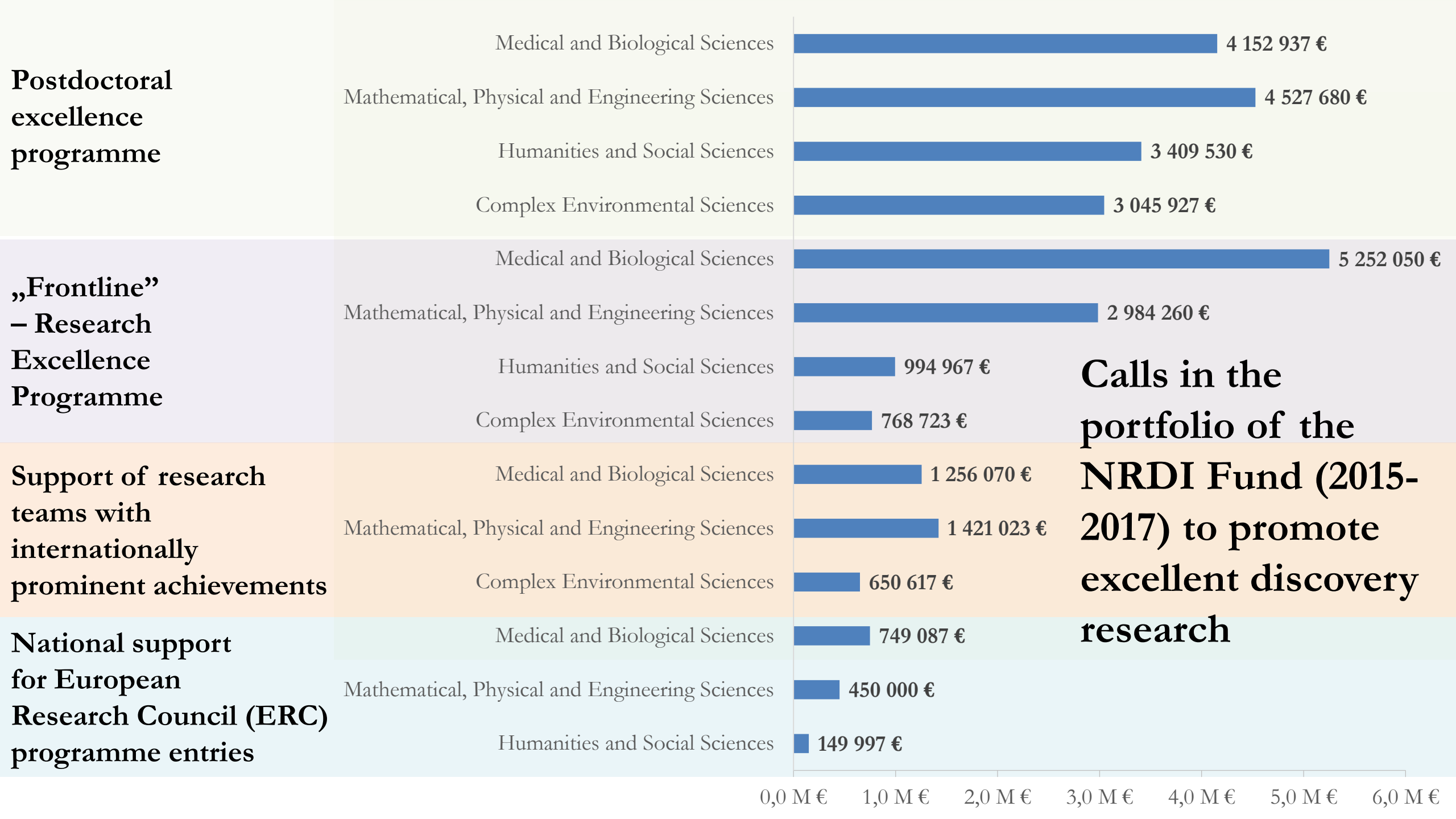
open to basic research projects without thematic restrictions

Areas of discovery research funding in Hungary (2015-2017)



MOMENTUM OF INNOVATION





Calls in the portfolio of the NRDI Fund (2015-2017) to promote excellent discovery research

Applied research programmes supporting scientific excellence

Competitiveness and excellence cooperation programmes
funded by both Structural Funds and NRDIFund.

The call is aimed at encouraging long-term sustainable strategic cooperation between businesses, research centres and higher education institutions resulting in marketable scientific results offering a solution for economic and social problems. **In the programme funded by the NRDIFund, the topics are restricted to the following areas:**

2016

**Leading
mortality
causes**

Ecology

**Material
Sciences**

2017

**Develop-
ment of
digital
production
technology**

**Agri-
innovation
and bio-
technology
projects**

Applied research programmes supporting scientific excellence

National Excellence Programme (NKP) – funded by NRDI Fund

Aim: Facilitating the social and economic utilisation of discovery research findings by defining strategic areas where Hungary has the sufficient level of scientific excellence for the implementation, so that such goals can be reached faster and more efficiently in cooperation with scientific, industrial and social stakeholders.

2017

National
Brain
Research
Programme

National
Quantum
Technology
Programme

2017

Research
related to
ELI

Artificial
Intelli-
gence

Security

Water
efficiency,
water
safety

Protein
research

MOMENTUM OF INNOVATION



Applied research programmes supporting scientific excellence

Higher Education and Industry Cooperation Centres (FIEK) – funded by both Structural Funds and NRDI Fund.

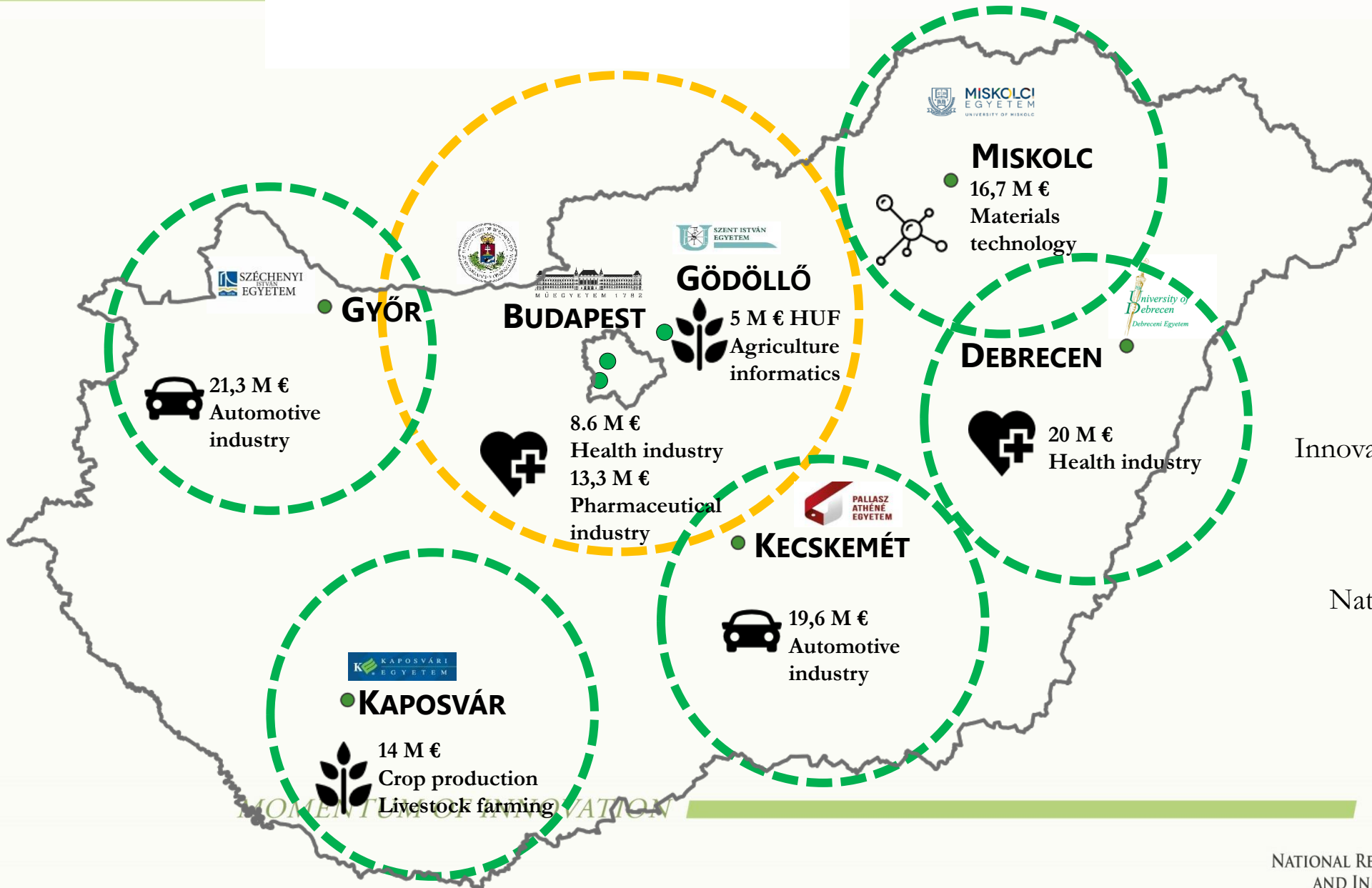
The funding programme enables the creation of centres based on corporate RDI demand and using the research and development capacity of universities.

Establish the research infrastructure for industrial development projects based on actual market needs, in cooperation with excellent research institutions in the specific field;

Develop domestic research infrastructure in the form of cooperation between the industrial and higher education sectors, where the created RDI capacity generates new competitive products and service.

In 2016, EUR 88 million was earmarked for creating new R&D centres in Győr, Kaposvár, Miskolc, Kecskemét and Debrecen, and three consortia in Central Hungary with a total amount EUR 26 million.

Creating Higher Education and Industry Cooperation Centres



 **EDIOP**

Economic Development and
Innovation Operational Programme

 **NRDI Fund**

National Research, Development
and Innovation Fund



NATIONAL RESEARCH, DEVELOPMENT
AND INNOVATION OFFICE
HUNGARY

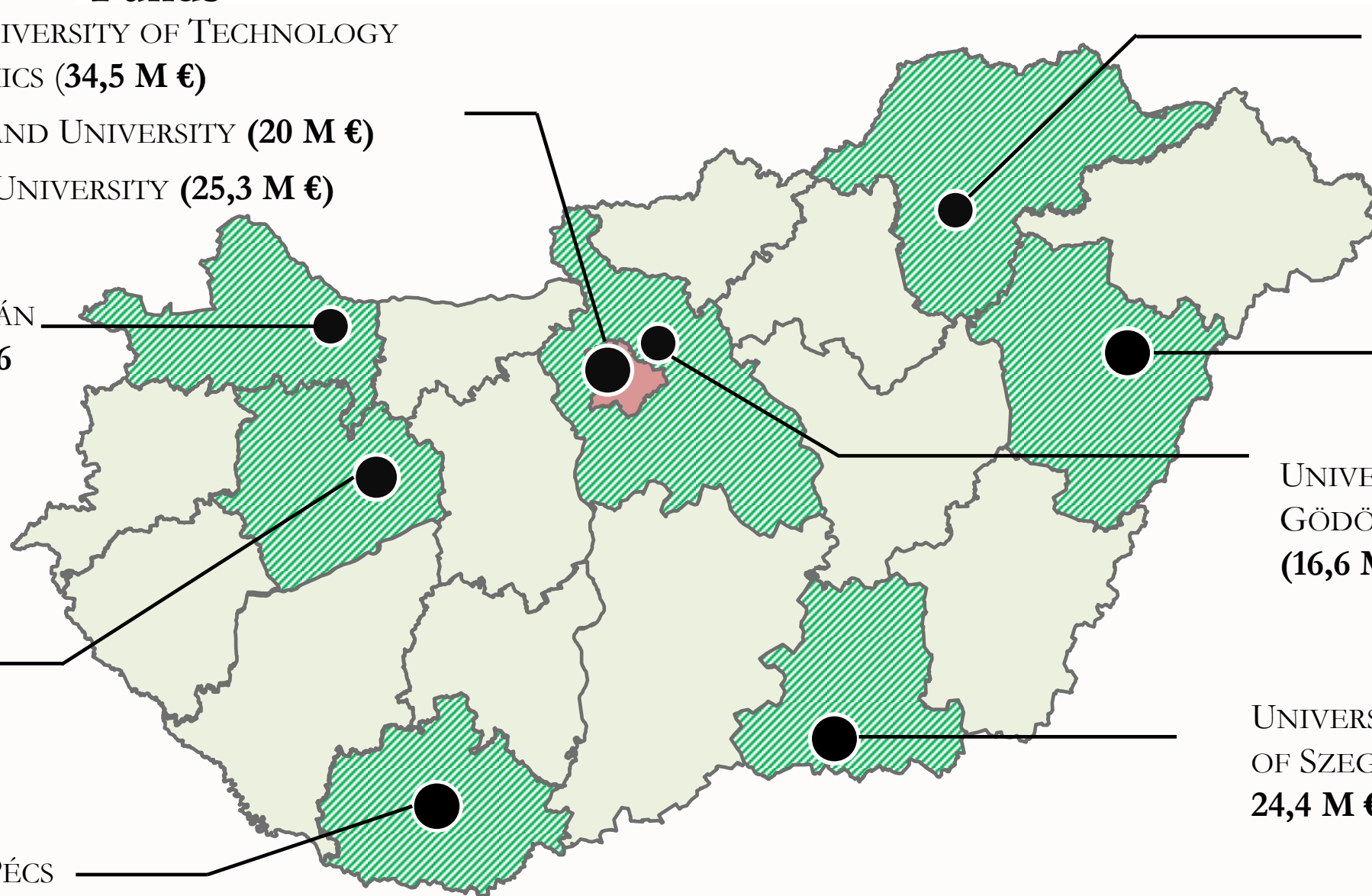
Most successful universities in 2015-2017 in knowledge transfer calls supporting excellence funded by the NRDIFund and the Structural Funds

- BUDAPEST UNIVERSITY OF TECHNOLOGY AND ECONOMICS (34,5 M €)
- EÖTVÖS LORÁND UNIVERSITY (20 M €)
- SEMMELWEIS UNIVERSITY (25,3 M €)

SZÉCHENYI ISTVÁN UNIVERSITY (26,6 M €)

UNIVERSITY OF PANNONIA (14,3 M €)

UNIVERSITY OF PÉCS (12 M €)



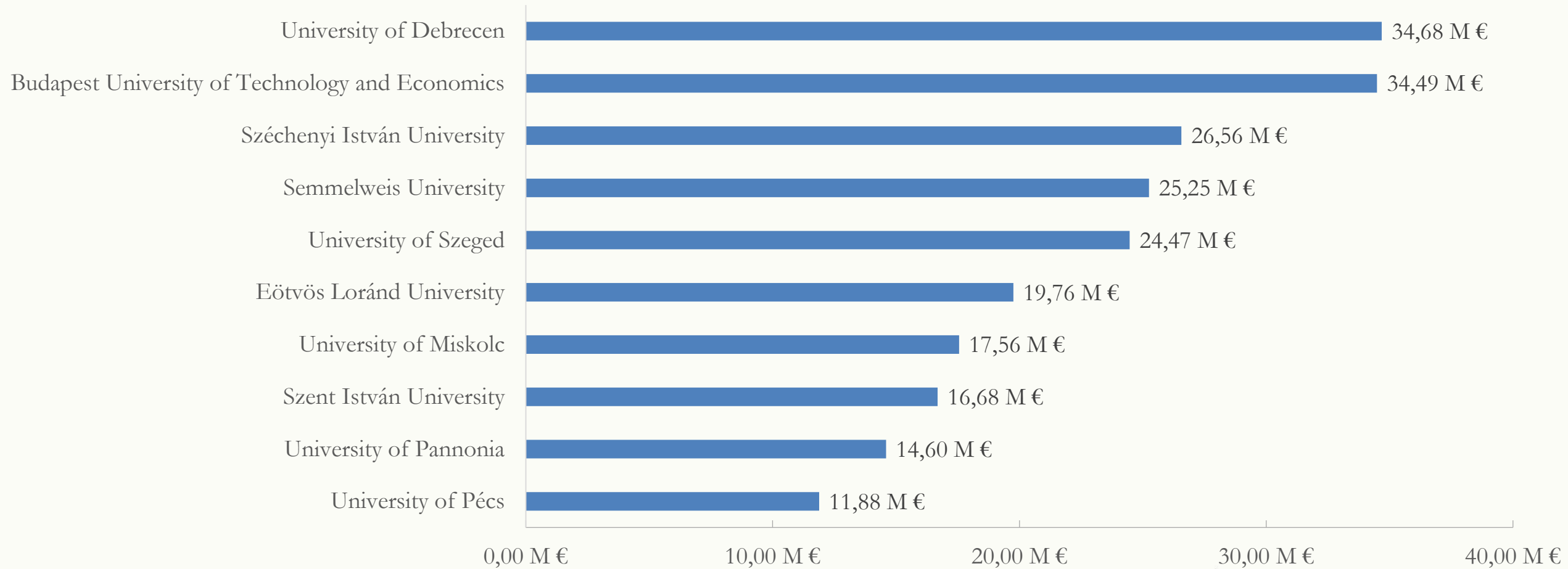
MISKOLC UNIVERSITY (17,6 M €)

UNIVERSITY OF DEBRECEN (34,6 M €)

UNIVERSITY OF GÖDÖLLŐ (16,6 M €)

UNIVERSITY OF SZEGED 24,4 M €

Most successful universities in the past 3 years in the knowledge transfer calls supporting excellence funded by the NRDIFund and the Structural Funds

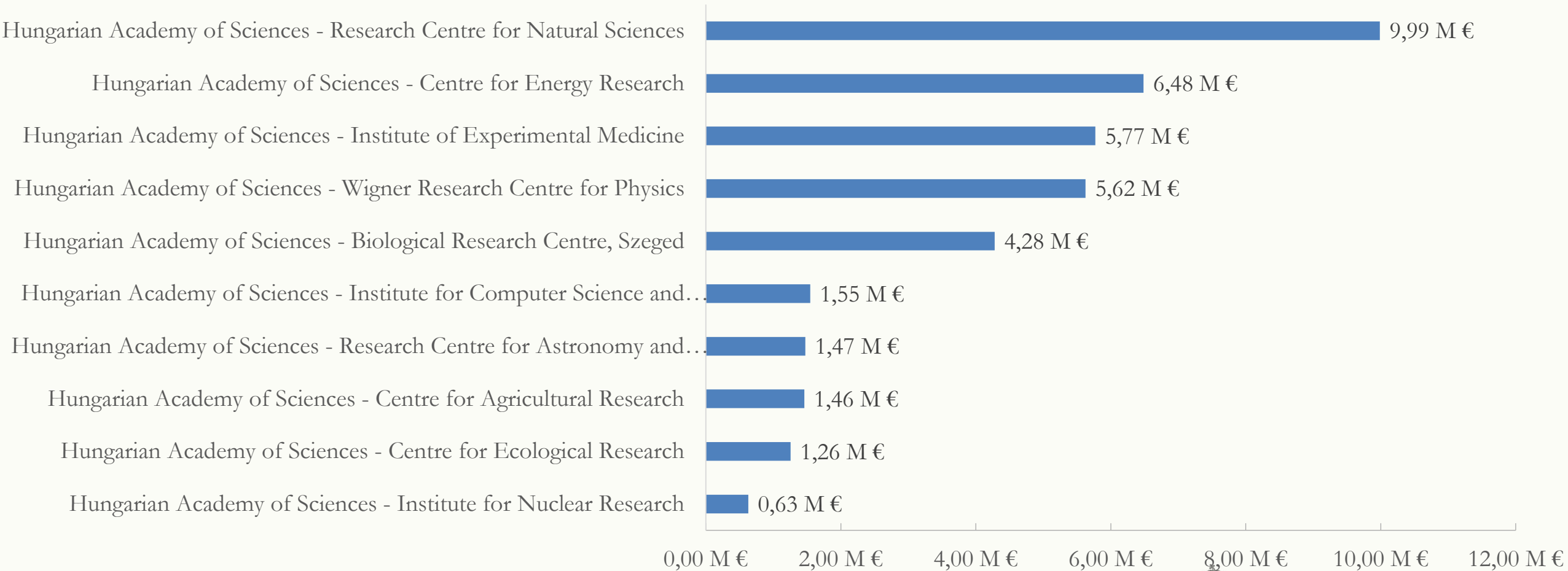


MOMENTUM OF INNOVATION



NATIONAL RESEARCH, DEVELOPMENT
AND INNOVATION OFFICE
HUNGARY

Most successful HAS research institutions in the past 3 years in the knowledge transfer calls supporting excellence funded by the NRDIFund and the Structural Funds



MOMENTUM OF INNOVATION



BUDAPEST

- RESEARCH CENTRE FOR NATURAL SCIENCES (9.99 M €)
- CENTRE FOR ENERGY RESEARCH (6.48 M €)
- INSTITUTE OF EXPERIMENTAL MEDICINE (5,77 M €)
- „WIGNER” RESEARCH CENTRE FOR PHYSICS (5,625 M €)
- INSTITUTE FOR COMPUTER SCIENCE AND CONTROL (1,55 M €)
- CENTRE FOR AGRICULTURAL RESEARCH (1,46 M €)

SOPRON
ASTRONOMY
AND EARTH
SCIENCES (1,47 M €)

TIHANY
CENTRE FOR
ECOLOGICAL
RESEARCH (1,26 M €)

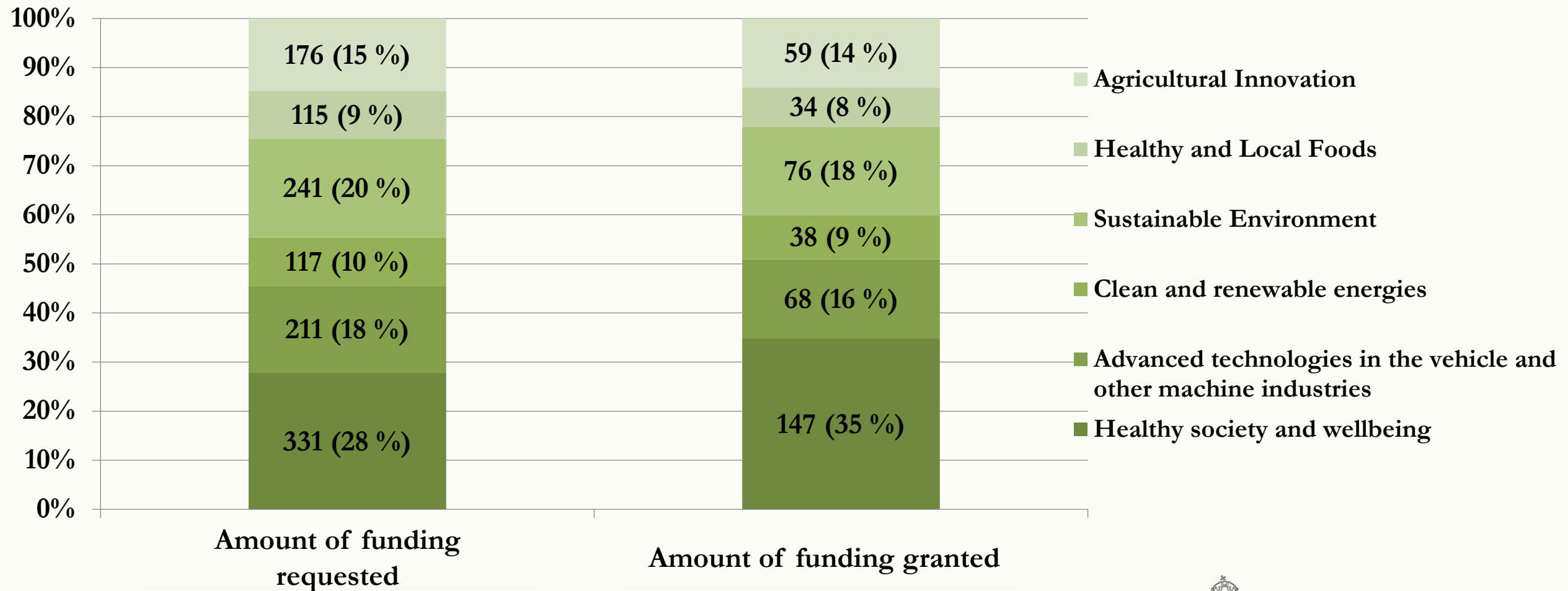
DEBRECEN
INSTITUTE FOR
NUCLEAR RESEARCH
(0,63 M €)

SZEGED
BIOLOGICAL
RESEARCH
CENTRE (4,27 M €)

Most successful institutions of the HAS in 2015-2017 in knowledge transfer calls supporting excellence



Submitted proposals according to S3 categories between 2015-2017



MOMENTUM OF INNOVATION



Two funded Hungarian research initiatives among 10 European Teaming proposals



The main goal of the Centre of Excellence on Cyber-Physical Production Systems is to boost the innovation process, to create industry-relevant results, to train the next generation of highly skilled experts and to ensure the background for a sustainable and competitive production ecosystem for various industry sectors in Hungary and in Europe

Full budget:
€21,7 million

Members of the consortium:

- Budapest University of Technology
- Hungarian Academy of Sciences
- Fraunhofer institutions



The goal of the project is to set up the Hungarian Centre of Excellence for Molecular Medicine placing strong emphasis on translational medicine and promoting the clinical application of basic research results.

Full budget:
€52, million

Members of the consortium:

- University of Szeged
- Hungarian Academy of Sciences
- University of Debrecen
- Semmelweis University
- European Molecular Biology Laboratory



ELI- ALPS project



ELI will be

- the world's **first international laser user facility**, providing unique research opportunities for the future *“The CERN of laser research”*
- a **distributed research infrastructure** based initially on 3 facilities in the Czech Republic, Hungary and Romania
- the first ESFRI project to be **implemented in the new EU Member States**
- **pioneering a novel funding model** combining structural funds (ERDF) for the implementation and contributions to an ERIC for the operation

MOMENTUM OF INNOVATION



NATIONAL RESEARCH, DEVELOPMENT
AND INNOVATION OFFICE
HUNGARY

ELI- ALPS project

ELI-DC Brussels

The consortium that is responsible for the coordination of the three research centres during implementation

ELI-ALPS Szeged

Hungary
ultrashort laser pulses at high repetition rate

ELI-BL Dolny Brezany

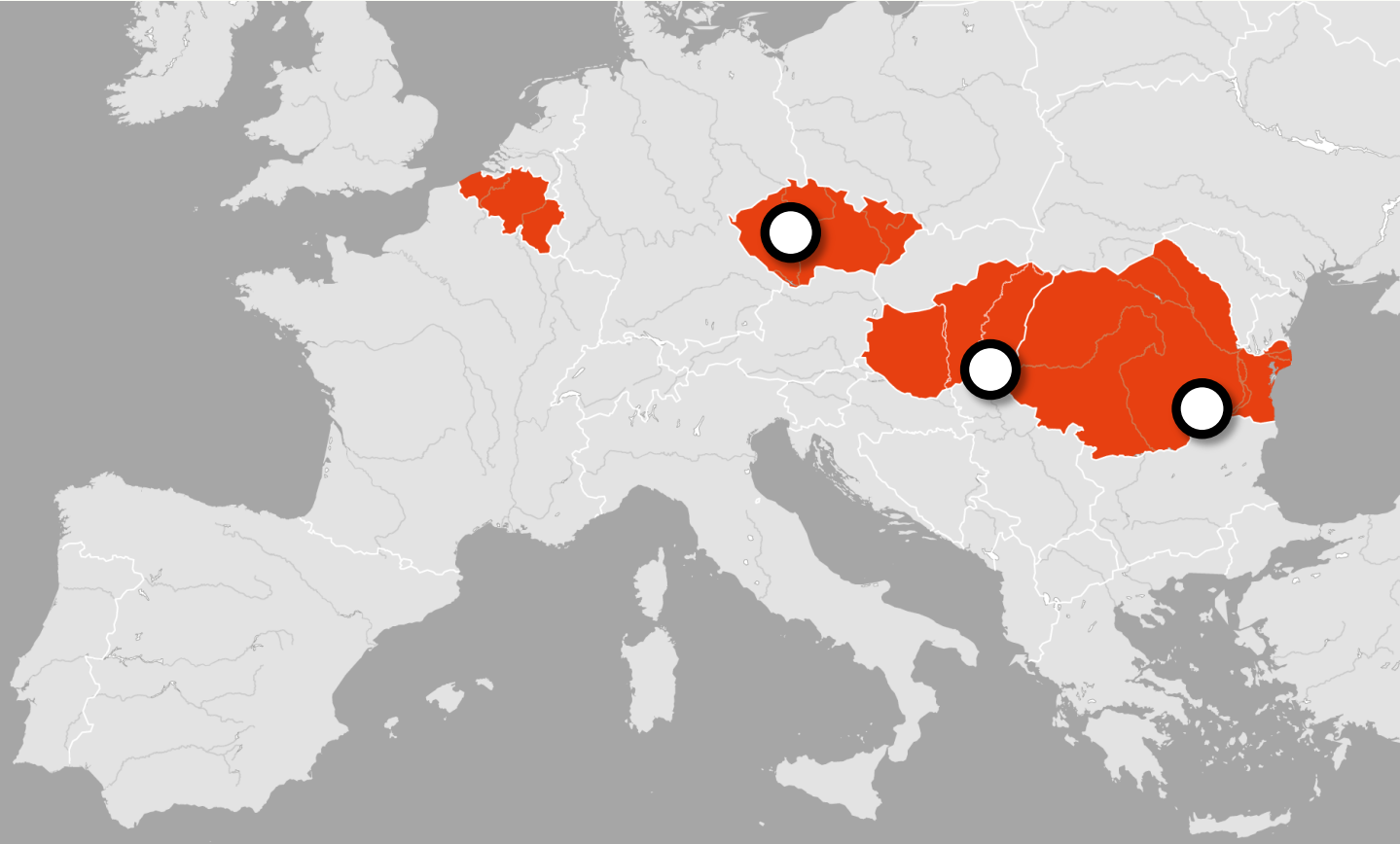
Czech Republic
ultrashort x-ray generation, particle acceleration

ELI-NP Magurele

Romania
ultra-intense optical and gamma ray pulses

UHFS

Ultra-High-Field Science
unprecedented laser field strength
(location: to be decided later)



THANK YOU FOR YOUR
ATTENTION!

www.nkfi.gov.hu/english

MOMENTUM OF INNOVATION



NATIONAL RESEARCH, DEVELOPMENT
AND INNOVATION OFFICE
HUNGARY

Felfedező kutatások – top támogatottak

