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EMERGING ZONE

SZÉCHENYI  2020

TÁMOP-4.2.1.C-14/1/KONV-2015-0013

„Mérlegen az eddigi tapasztalatok és a
jövőbeni lehetőségek”-

Horizon 2020 szakmai konferencia

2015.09.17

A HU-MOLMEDEX projekt bemutatkozása, nyertes pályázói tapasztalatok

Dr. Széll Márta
SZTE ÁOK

SZÉCHENYI  2020



MAGYARORSZÁG
KORMÁNYA

Európai Unió
Európai Szociális
Alap



BEFEKTETÉS A JÖVŐBE

Widening Participation: Eligibility Criteria

Definition: "A composite indicator developed to measure the research excellence in Europe, meaning the effects of the European and national policies on the modernisation of research institutions, the vitality of the research environment and the quality of research outputs in both basic and applied research."

- **Threshold:** MS below 70% of the EU average

- **“low RDI performing” Member States for Widening actions:** Latvia, Croatia, Lithuania, Malta, Slovakia, Romania, Luxembourg, Poland, Bulgaria, Estonia, Portugal, Slovenia, Cyprus, Czech Republic and Hungary

	Composite indicator of research excellence 2010
EU27 average	47,9
EU27 70% threshold	33,5
Member States below 70% of the EU27 value	
Latvia	11,5
Croatia	12,2
Lithuania	13,9
Malta	17,5
Slovakia	17,7
Romania	17,8
Luxembourg	19,8
Poland	20,5
Bulgaria	24,7
Estonia	25,9
Portugal	26,5
Slovenia	27,5
Cyprus	27,8
Czech Republic	29,9
Hungary	31,9
Member States above 70% of the EU27 value	
Greece	35,3
Spain	36,6
Ireland	38,1
Italy	43,1
France	48,2
Austria	50,5
United Kingdom	56,1
Belgium	59,9
Germany	62,8
Finland	62,9
Sweden	77,2
Denmark	77,7
Netherlands	78,9

Source: DG Research and Innovation - Economic Analysis Unit

Data: Eurostat, DG JRC - ISPRA

The Composite Indicator of Research

four variables:

- Highly cited **publications** of a country as a share of the top 10% most cited publications normalised by GDP
- Number of world class **universities (in top 250)** and **public research institutes (in top 50)** in a country normalised by population
- **Patent** applications per million population
- Total value of **ERC grants** received divided by public R&D performed by the higher education and government sectors



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Your area

Spreading Excellence and Widening Participation

Article [Newsroom](#)

Maximising investment in research and innovation will enable the European Research Area to function in a more streamlined and homogeneous way, allowing the individual strengths of each Member State to be optimised.

Despite serious efforts deployed at national and European level, the European Union sees significant internal disparities in terms of research and innovation performance as also identified in the [Innovation Union Scoreboard](#). These trends are further exacerbated by the continuing severe financial crisis, and the subsequent adverse effects on public research and innovation budgets.

Also, there is significant evidence pointing to the fact that the pathway to economic growth and competitiveness is strongly connected to the scaling up of investment in research and innovation.

In order to address these challenges, Horizon 2020 introduces specific measures for spreading excellence and widening participation. These measures are targeted at low-performing Member States in terms of research and innovation, and they will be implemented by the Member States most in need of the new Cohesion policy for the 2014-2020 programming period.

- The **Teaming** action (associating advanced research institutions to other institutions, agencies or regions for the creation or upgrade of existing centres of excellence) is a new feature under Horizon 2020. It will provide new opportunities to the parties involved, with real prospects for growth through tapping into new collaboration and development patterns, including the establishment of new scientific networks, links with local clusters and opening up access to new markets. This will offer national and local research new possibilities for exploitation and value creation and boost the innovation potential of the countries involved.
- **Twinning** will help strengthen a defined field of research in a knowledge institution through linking with at least two internationally-leading counterparts in Europe.
- The **ERA Chairs** scheme will provide support for universities and other research institutions to attract and maintain high quality human resources and implement the structural changes necessary to achieve excellence on a sustainable basis.
- The **Policy Support Facility** will aim to improve the design, implementation and evaluation of national/regional research and innovation policies. It will offer expert advice to public authorities at national or regional level on a voluntary basis, covering the needs to access the relevant body of knowledge, benefit from the insight of international experts, use state of the art methodologies and tools, and receive tailor-made advice.
- Supporting access to international networks for excellent researchers and innovators who lack sufficient involvement in European and international networks. This will include support provided through **COST**.





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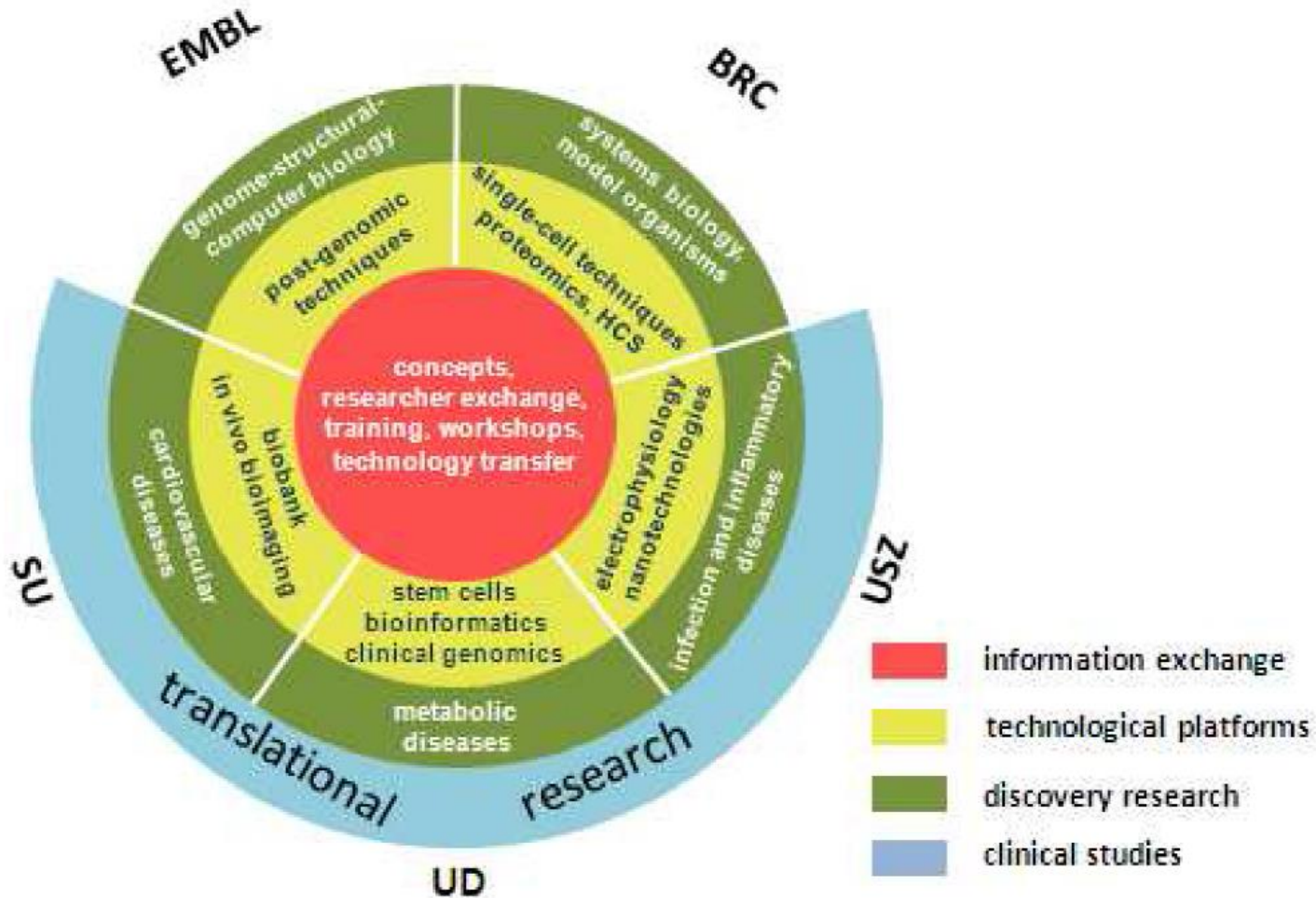
Why should European society & businesses focus on data? Debate & answers at #EDF2015
bit.ly/1QgQuat #BigData

Participant No*	Participant organisation name	Participant short name	Country
1	National Innovation Office <i>(low performing country)</i>	NIH	HU
2	Biological Research Centre of the Hungarian Academy of Sciences <i>(low performing country)</i>	BRC HAS	HU
3	University of Debrecen <i>(low performing country)</i>	UD	HU
4	University of Szeged <i>(low performing country)</i>	USZ	HU
5	Semmelweis University <i>(low performing country)</i>	SU	HU
6	European Molecular Biology Laboratory <i>(high performing country)</i>	EMBL	DE

Supporting partner

Supporting partner	Country
Research Center for Molecular Medicine of the Austrian Academy of Sciences (Letter of Intent is uploaded as Appendix)	AT

Specialization and complementarity among partners

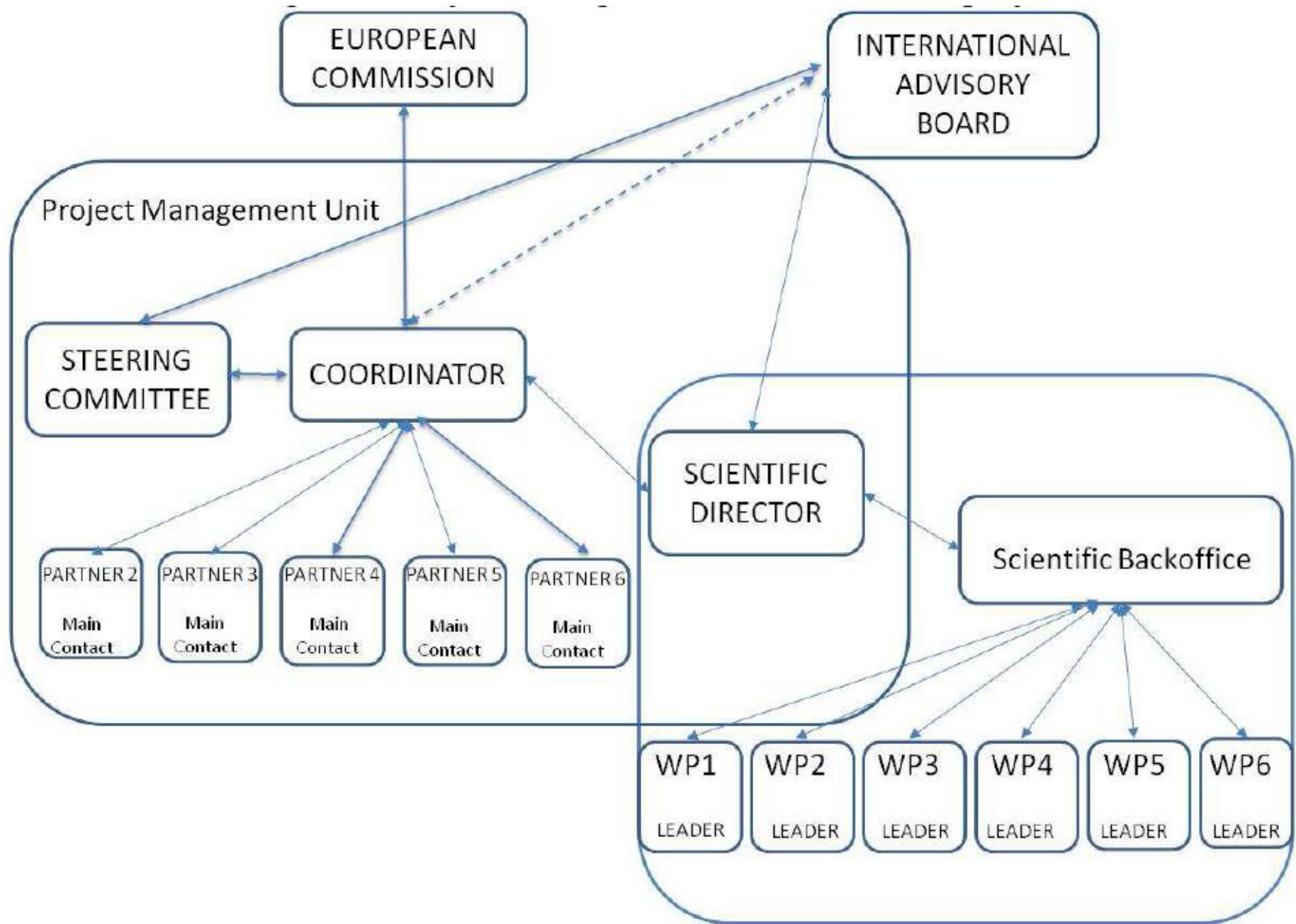


The unique research focus of the HCEMM will be translational research capitalizing on the state of the art advancement of molecular medicine.

1.3.2. SWOT analysis

The SWOT analysis underpins the long-term science and innovation strategy of the future Cluster.

Strengths	Weaknesses
<p>S1: Engagement of leading Hungarian basic and applied research bodies with strong focus on technology development in molecular and cellular biology</p> <p>S2: Intense international scientific collaboration</p> <p>S3: National and regional leaders in several areas including some “omics” research</p> <p>S4: BRC emerging as an internationally recognized systems/synthetic biology research center</p> <p>S5: Spin-off companies utilizing the results of the academic sphere</p> <p>S6: Szeged and Debrecen both have the geographical potential to become poles of development in the region</p> <p>S7: High reputation international teaching programs of medicine in English and German at the three universities for thousands of students from all over the World.</p> <p>S8: Excellent doctoral and postdoctoral programs</p> <p>S9: Recent governmental infrastructural investments in clinical facilities of the three universities</p> <p>S10: Supporting local municipalities in utilization of EU structural funds</p>	<p>W1: Low proportion of medically relevant research projects</p> <p>W2: Weak connections between basic research and clinically applicable results</p> <p>W3: Limited resources for upgrading infrastructure to perform frontline research, for staff mobility, twinning</p> <p>W4: Lack of expertise in some areas of bioinformatics/systems biology and some high-throughput experimental techniques</p> <p>W5: Higher than optimal diversity of research projects, small research teams</p> <p>W6: Lack of international evaluation of research groups</p> <p>W7: Lack of adequate innovation management</p> <p>W8: Insufficient financial resources at national level for postdoctoral fellows, training and conferences</p> <p>W9: Isolation from the international pool of human resources</p> <p>W10: Fragmented translational landscape</p>
Opportunities	Threats
<p>O1: Engagement of the NIH as coordinator could provide a national governance basis for the HCEMM as well as its establishment</p> <p>O2: Focusing on medically relevant research, utilization of partnership between leading research institutes and universities of the country via mutual exploitation of resources, biobanks and infrastructure</p> <p>O3: Reaching a critical mass of intellectual and infrastructural capacities in biomedical research leading to high impact results and visibility in ERA.</p> <p>O4: Introduction of novel medical technologies through effective translational research</p> <p>O5: Strengthening a regional leader position in molecular medicine through strategic partnerships with leading</p>	<p>T1: Lack of national level governance between the key research institutes in the field of the molecular medicine</p> <p>T2: Brain drain of talented, young researchers to more developed countries</p> <p>T3: Long term isolation from leading European research teams and institutions</p> <p>T4: Increasing RTD costs can not be matched</p> <p>T5: Underdeveloped industrial background in the region</p> <p>T6: Underdeveloped infrastructure of the region</p> <p>T7: Limited access to governmental co-financing</p> <p>T8: Introduction of rigid and centralized administrative procedures at the national level</p>
<p>European institutes and increasing bilateral mobility</p> <p>O6: Obtaining better positions in ranking systems and boosting European integration via training courses and conferences</p> <p>O7: Increased participation in international research projects, especially in H2020</p> <p>O8: Better utilization of the innovation potential in technology transfer to biotech companies and the pharma industry</p> <p>O9: Unique position for cross-border cooperation with institutions in neighbouring countries (Romania, Serbia, Slovakia).</p>	



WHAT WILL BE FINANCED BY HCEMM? ~40 M EUR (EU+NKFI)
2016-2020

Research groups ~ 40 (salaries and cost of research)

Units of Translational Research ~ 15 (salaries, cost of research, translation)

Infrastructure development:

Space (laboratories and offices) for the new research groups at each institution

Basic equipments and core facilities

Overheads to BRC and Universities

Administration

Additional grants will have to be secured from the beginning from Hungarian and International funds, foundations, donations , ... ERC, momentum grants, others..

Co-funds by BRC and Universities

Long term sustainability! Must be outlined in the Business plan

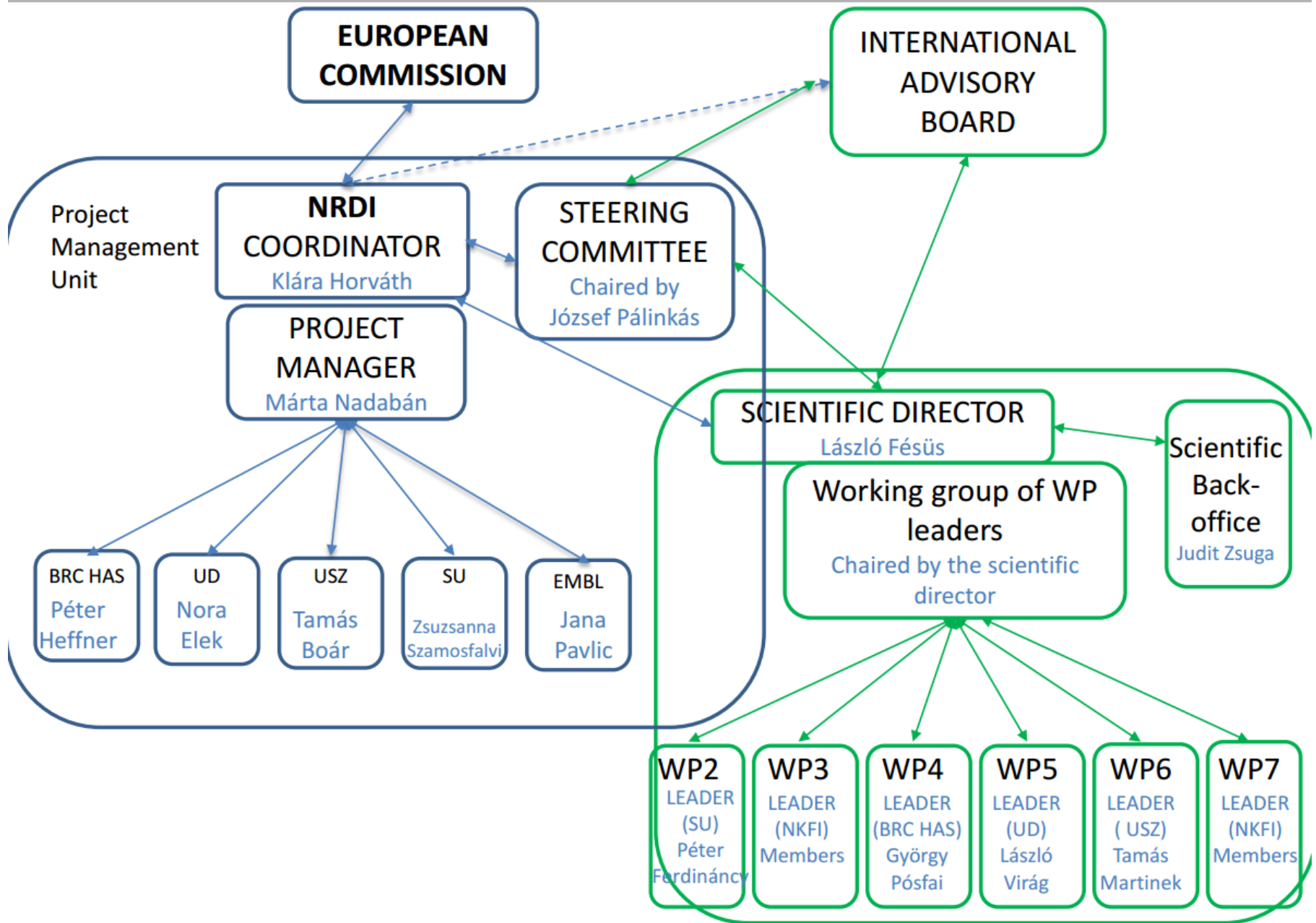


**KEEP
CALM
'CAUSE
WE
WON**

167 proposals



**31 supported proposals
(3 with Hungarian contribution)**

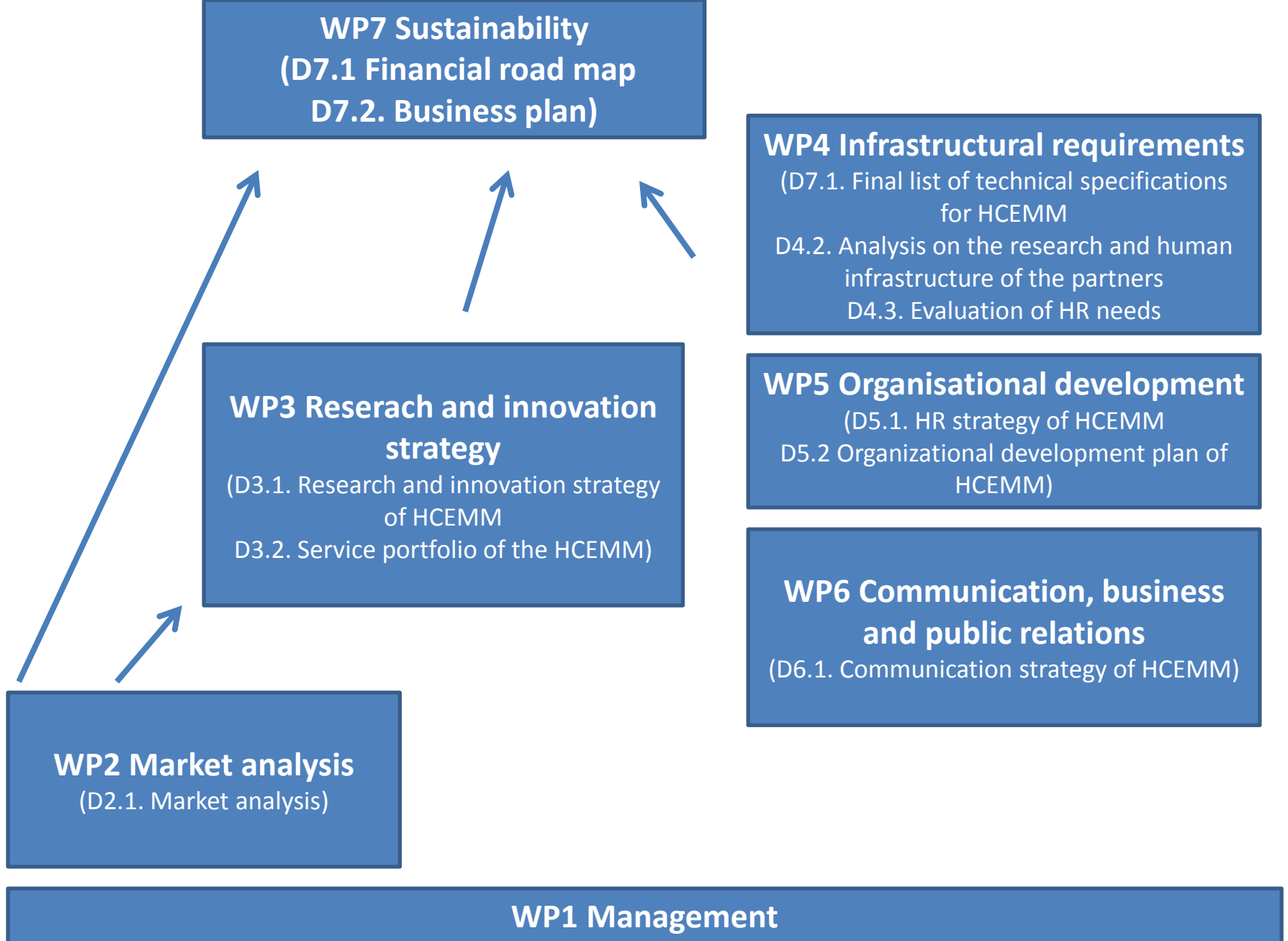


Goals

To form a new Centre of Excellence for Molecular Medicine with the coordination of the National Research, Development and Innovation Office.

The objectives of the one-year action:

- Detailed analysis of research and technology potentials of the founding institutions (WP2);
- Development of the long term research and innovation strategy (WP3);
- Formation of the Hungarian Centre of Excellence for Molecular Medicine as a legal entity, defining its scope, organization structure, optimal location, infrastructural needs and human resources (WP4, WP5);
- Defining the communication and business strategy as well as public relations partnerships (WP6)
- Assembling the initial joint Faculty of the Centre for Molecular Medicine (WP6);
- Producing the business plan for long term sustainability of the centre (WP7).



Budget allocation

Summary per partner (funding)

Partner name	Personnel costs	Travel	Other	Overhead	TOTAL
NKFIH	€ 54 600	€ 3 000	€ 27 000	€ 19 650	€ 104 250
BRC HAS	€ 52 800	€ 2 400	€ -	€ 13 800	€ 69 000
UD	€ 57 600	€ 3 200	€ 15 000	€ 15 200	€ 91 000
SzU	€ 52 800	€ 2 400	€ -	€ 13 800	€ 69 000
SU	€ 52 800	€ 2 400	€ -	€ 13 800	€ 69 000
EMBL	€ 70 008	€ 5 680	€ -	€ 18 922	€ 94 610
Total	€ 340 608	€ 19 080	€ 42 000	€ 95 172	€ 496 860

Work packages

Work package No	Work Package Title	Lead Participant No	Lead Participant Short Name	Person-Months	Start Month	End month
WP0	Management	1	NKFIH	18	M1	M12
WP1	Market analysis	5	SU	11,5	M1	M4
WP2	Research and innovation strategy	1	NKFIH	23	M1	M7
WP3	Infrastructural requirements	2	BRC HAS	12,3	M1	M7
WP4	Organizational and HR development	3	UD	22	M3	M7
WP5	Communication, business and public relations	4	USZ	12	M1	M9
WP6	Sustainability	1	NKFIH	24	M1	M12
				123		



**KEEP
CALM
'CAUSE
WE
WON**

167 proposals



**31 supported proposals
(3 with Hungarian contribution)**



**KEEP
CALM**

hopefully **WE** *we will*

**WIN
AGAIN**

167 proposals



31 supported proposals
(3 with Hungarian contribution)



9 supported proposals at the end
of the 2nd round



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SZÉCHENYI  2020

KÖSZÖNÖM A FIGYELMET!

SZÉCHENYI  2020



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Alap



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