

# HEALTH RIS3 Sector North-East Region, Romania



# Entrepreneurial Discovery Process is the core of RIS3



# EDP's Roadmap



Participants:  
4helix players  
(universities &  
research centers,  
companies, public  
authorities, NGOs)

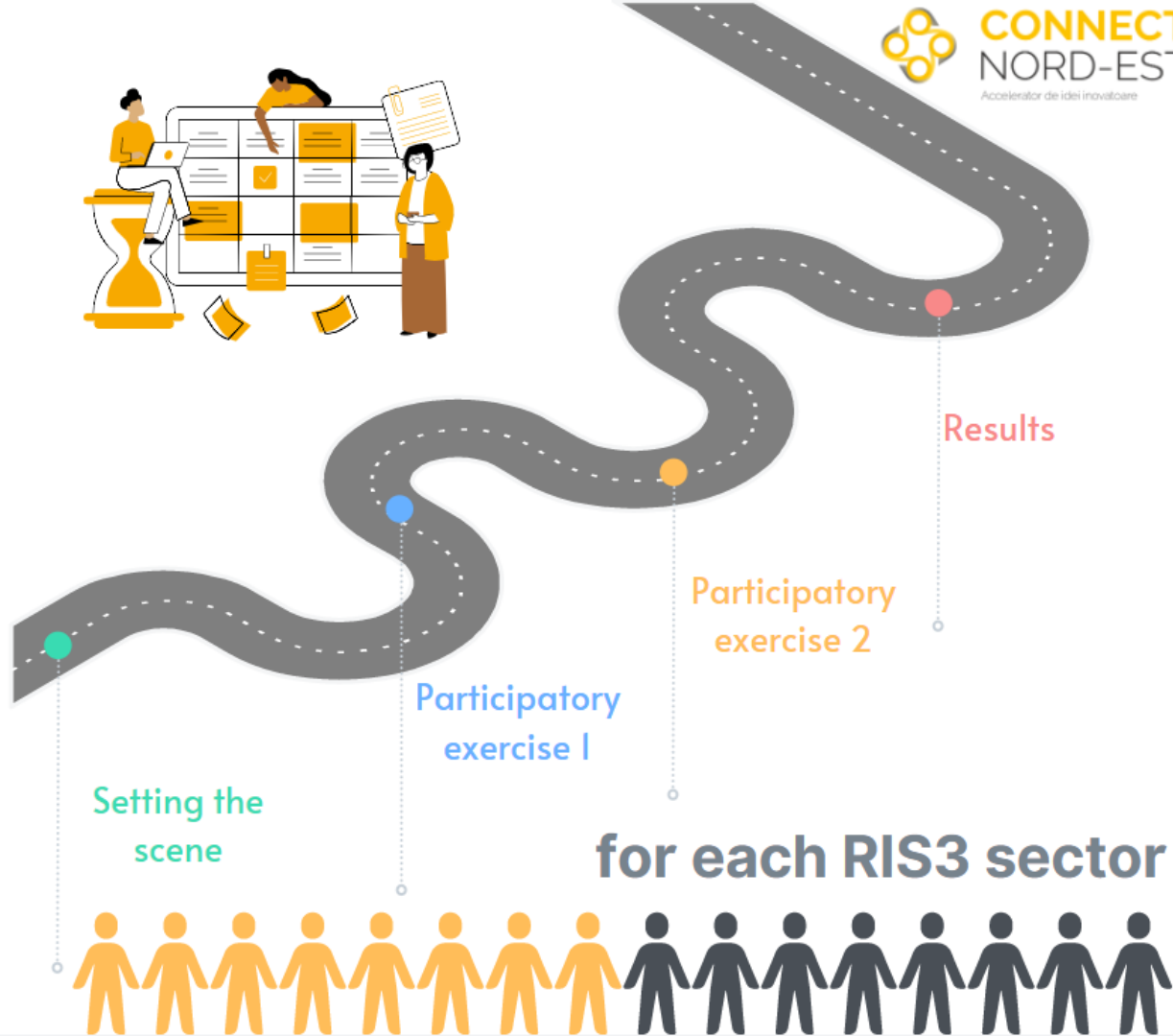
Identify regional  
development directions  
through smart  
specialization (niche  
sectors of competitive  
advantages & their  
challenges)

Identify innovative  
solutions for  
development through  
smoothly, but  
strategically guided  
interaction

Identify relevant  
partners among  
relevant the regional  
value chains players

Enable a primary, direct  
estimation of the  
innovation absorption  
potential among:  
potential producers  
and/or  
potential users

Opportunity to  
discuss and  
prepare proposals  
for legislative  
adjustments  
(if necessary)



# EDP online edition (2020)



## Series I of EDP consultations ONLINE SURVEYS

Identification of the TYPES OF PROJECTS to be included in the regional RIS3 portfolio

Formulating INNOVATIVE SOLUTIONS to the challenges identified in each specialization niche during the previous EDP focus groups (collecting project ideas spanning from samples of applied research, to innovative businesses, along sectorial and inter-sectorial value chains)



## Series II of EDP consultations ONLINE FOCUS GROUPS

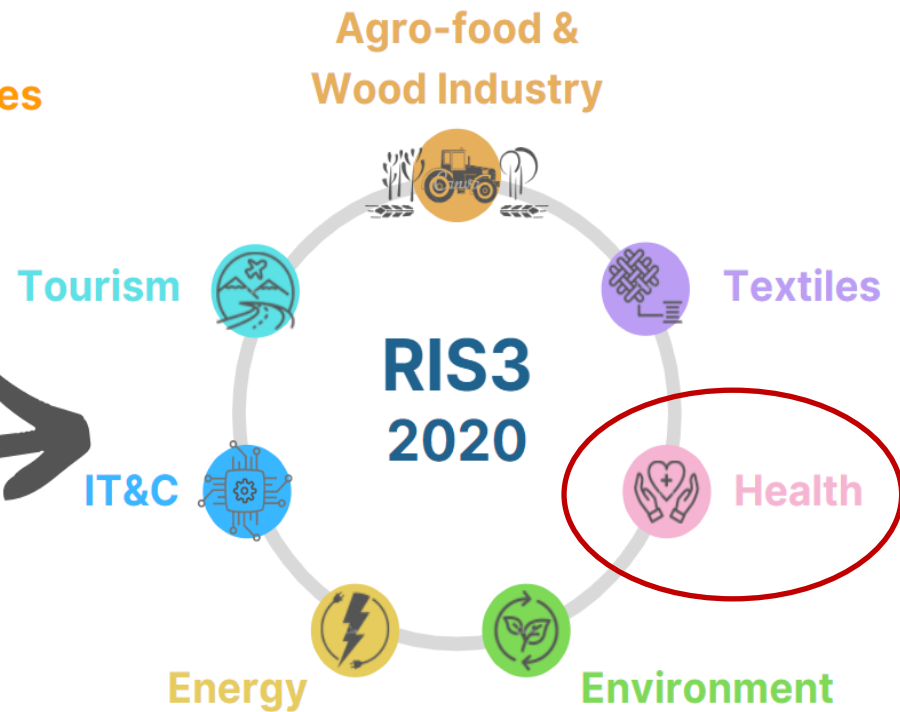
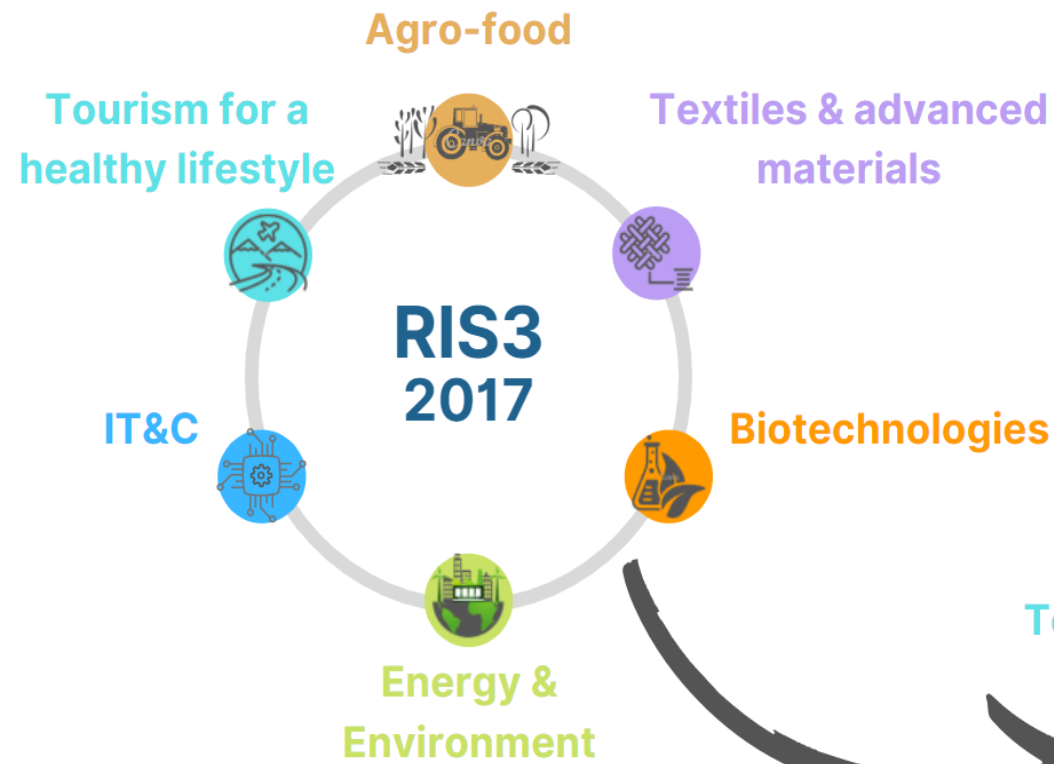
Updating the VISION and the DIRECTIONS of development of the RIS3 sectors during the coming programming period

- validation of smart specialization niches,
- identification of new niches,
- update SWOT analysis,
- setting specific objectives and achievement indicators of these objectives

Identifying the TYPES OF MEASURES (RIS3 horizontal priorities) necessary for the implementation of these solutions.

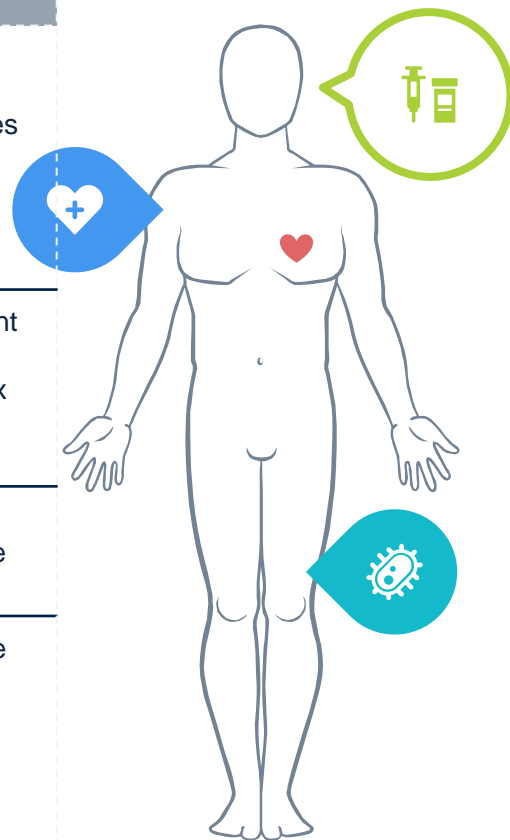


Resulting in  
a final configuration of vertical and  
horizontal RIS3 priorities



# HEALTH Sector (indicative and non-exhaustive description)

Niches	Sub-niches
<b>Medical and pharmaceutical biotechnologies</b>	<ul style="list-style-type: none"> <li>▪ Personalised therapies</li> <li>▪ New active substances and medicines</li> <li>▪ Advanced technologies and materials in pathogen testing and detection programmes</li> <li>▪ Solutions and systems to combat the spread of infections</li> <li>▪ Nanobiotechnologies</li> <li>▪ Advanced materials for health</li> <li>▪ Regenerative medicine</li> </ul>
<b>Precision medicine</b>	<ul style="list-style-type: none"> <li>▪ Innovative medical devices, technologies, tools and methods for diagnosis, treatment and prognosis</li> <li>▪ Interdisciplinary support in palliative care for patients with multi-morbidity or complex needs</li> <li>▪ Interrelationship of micro-organisms with the environment, animals and humans</li> </ul>
<b>Prevention medicine</b>	<ul style="list-style-type: none"> <li>▪ Innovative medical devices, technologies, tools and prevention methods</li> <li>▪ Advanced systems and therapies to improve the quality of life in chronic progressive diseases</li> </ul>
<b>e-Health</b>	<ul style="list-style-type: none"> <li>▪ Methodological development and practical implementation of a health eCompetence framework</li> <li>▪ IT&amp;C solutions (hardware and software) in disease prevention, diagnosis and management</li> <li>▪ Artificial intelligence (AI) in medicine</li> <li>▪ Custom diagnostics / teragnostics imaging</li> </ul>
<b>Biosecurity</b>	<ul style="list-style-type: none"> <li>▪ Antibiotic resistance, research on antimicrobial agents, zoonoses, emerging diseases, innovative prevention methods — plasma and Paw</li> </ul>





# SWOT: HEALTH SECTOR

## STRENGTHS

- Existence of advanced education and research programs
- The existence of an R&D base with relevant scientific background in a large range of medical&technology domains
- Relevant research infrastructure
- Existence of 3 clusters in the region
- Existence of a significant number of active companies in the area
- Skilled labor force
- Regional actors interested in partnerships
- SMEs specializing in the production of innovative medical devices and tools
- The emergence of medical & IT hybrid start-ups

## OPPORTUNITIES

- Biotechnologies — emerging domain with real entrepreneurial opportunities
- Increasing demand for pharmaceuticals (vaccines, antiviral, etc.) obtained through biotechnologies, as well as methods for early testing of diseases (including as a result of COVID-19 epidemiological phenomenon)
- Demand for organic and nutritionally improved products due to lifestyle change and healthy lifestyle orientation
- Existence of dedicated budget lines from European, national and regional funds
- Membership of the region in international networks, e.g. S3 Industrial Modernisation Thematic Platforms: Thematic Partnership Personalised Medicine



## **VISION**

### **HEALTH SECTOR IN NORTH-EAST REGION**

Health for all: Have a healthier population and be able to treat our patients in the region.

Health as a driving force for innovation-based economic development; health services as a basis for an income-generating regional health industry.



# Specific objectives



**SO1**

Development of public-private partnerships - educational environment, for education and training programs for prevention and early detection of diseases.



**SO2**

Increasing investment in innovation in the medical and pharmaceutical field, through the use of advanced technological lines, more environmentally friendly and efficient



**SO3**

Digitization (internal and external) of medical institutions and standardization of information flows

# EDP 2020 - RIS3 NE Portofolio: PDL 2021

118 project proposals received  
Estimated budget = EUR 980.7 mill

Projects distribution:

- 46 companies
- 8 NGOs (incl clusters)
- 9 public administrations
- 22 research and academia

85 projects  
accepted after  
evaluation  
process  
EUR 728,8 mill

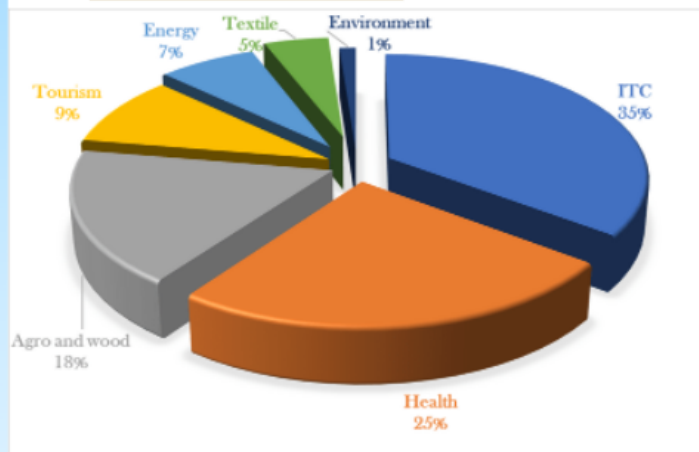
Type 1: Projects with economic activity  
(income generators), with a total value  
project of at least 1 million euros

Type 2: Projects for public research funding,  
with a total project value of a minimum of  
5 million euros

63  
project  
proposals

22  
project  
proposals

## Support activities for project development



Framing the  
project idea on  
the theme of  
financing  
programs

Identification of  
partners for the  
development of  
the project idea  
(if applicable)

Familiarization  
with financing  
programs ->  
decision

Specialized  
information on  
financing  
source ->  
dedicated RDA  
contact

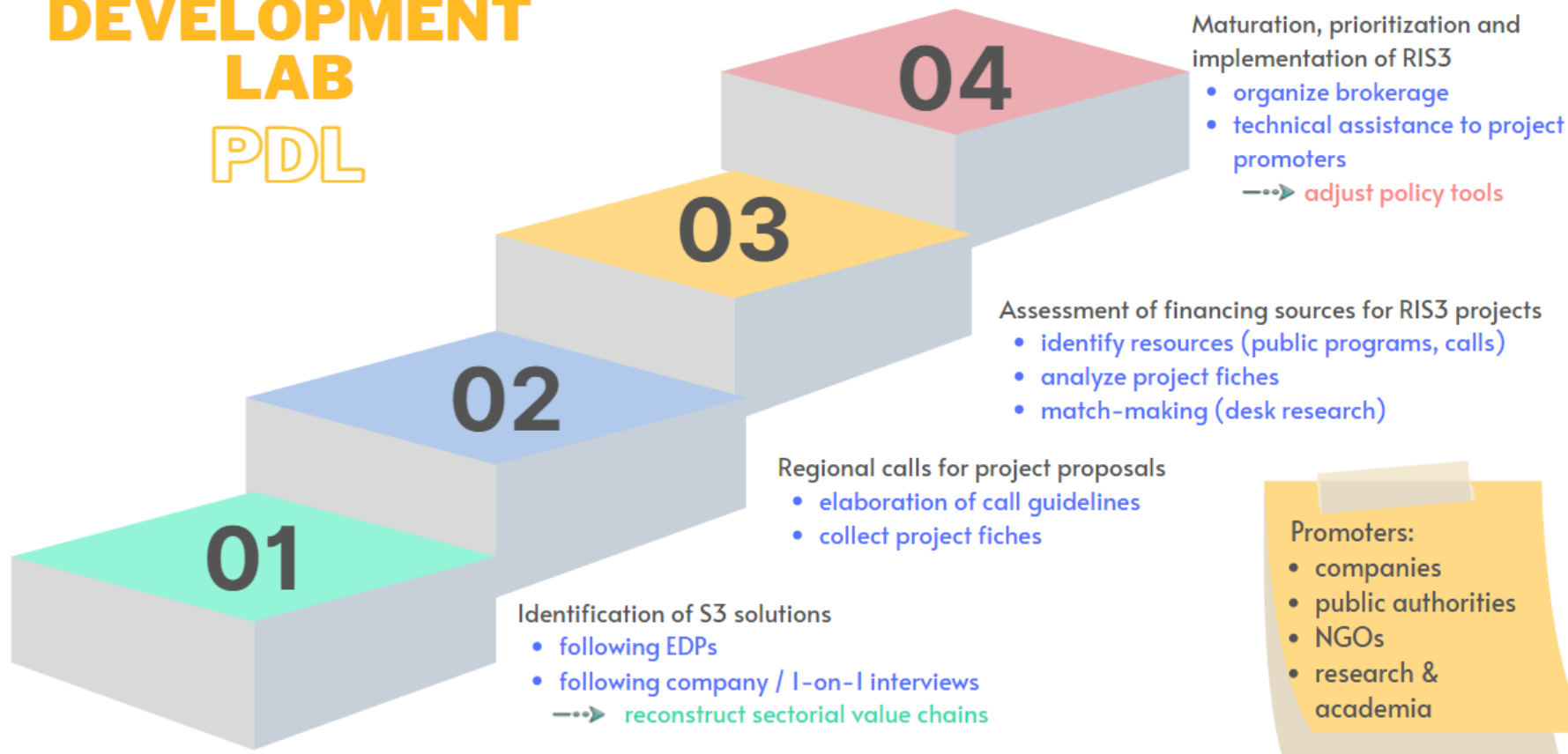
Application  
preparation  
workshops

Application  
submission

Administrative capacity development needs analysis -> Specialized information and training sessions  
Regular collection of feedback from stakeholders on the guidance and support measures offered in order to improve them

# EDP Input to RIS3 implementation

## PROJECT DEVELOPMENT LAB PDL





S3 Platforms (Thematic Partnership for Personalized medicine)

EIT (European Institute of Innovation & Technology)  
KICs (e.g. Health KIC, Manufacturing KIC)



Vanguard Initiative



## Internationalization

ERRIN (European Regions Research and Innovation Network)



I3 (Interregional Innovation Investments)



EEN (Enterprise Europe Network)



# Internationalization: Best practice ImagoMol



## Clusterul IMAGO-MOL membru in consorțiul regiunii-oglinda Nord-Est in cadrul proiectului Horizon CHERRIES

Regiunea Nord-Est a fost selectată de consorțiul care implementează proiectul CHERRIES, Constructing Healthcare Environments through Responsible Research Innovation and Entrepreneurship Strategies, ca regiune oglindă pentru a implementa modelul dezvoltat, valorificând propriile resurse teritoriale. Alte trei regiuni, Burgos, Coimbra și West Ireland au fost, de asemenea, selectate. La nivelul regiunii Nord-Est, consorțiul este coordonat de către ADR Nord-Est, iar membrii sunt Clusterul IMAGO-MOL în calitate de actor cheie în domeniul sănătății, alături de Spital și Clinica [...]



## Actiunile de internationalizare ale Clusterului IMAGO-MOL prezentate in cadrul evenimentului anual IURC

Colaborarea Clusterului IMAGO-MOL cu Health Medellín City Cluster, în contextul cooperării dintre Agenția pentru Dezvoltare Regională Nord-Est și Aria Metropolitană Valle Aburrá din Columbia, a fost prezentată în cadrul evenimentului anual IURC (International Urban and Regional Cooperation), ce s-a derulat pe 23 noiembrie 2021. Au fost, de asemenea, prezentate acțiunile pe care le-a susținut clusterul în sprijinul internaționalizării membrilor săi. Programul de Cooperare Urbana Internațională (IURC) 2016-2020 își propune să susțină cooperarea internațională urbană și [...]



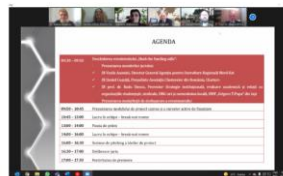
## Clusterul IMAGO-MOL, model de buna practica in cadrul Conferintei Internationale PHARMAPOLIS TEN13

Clusterul IMAGO-MOL a participat la Conferința Internațională PHARMAPOLIS TEN13, eveniment organizat în format hibrid în perioada 22-24 noiembrie 2021, de către Clusterul PHARMAPOLIS din Ungaria și Camera de Comerț Hajdú-Bihar. Conferința s-a focalizat pe două aspecte de interes pentru cluster: dezvoltarea și operaționalizarea clusterelor, precum și dezvoltarea de servicii și produse farmaceutice. Clusterul IMAGO-MOL a fost invitat să prezente traseul de succes al organizației, evoluția sa, prin dezvoltarea de proiecte colaborative și parteneriate naționale [...]



## Intalnire intre IMAGO-MOL si Superclusterul Twins' International MultiHelix (TIM)

Clusterul IMAGO-MOL și-a promovat activitatea reprezentanților clusterelor membre ale superclusterului TIM și a secretariatului acestuia, cu scopul de a prospecta potențiale oportunități de colaborare, în data de 28 aprilie. Întâlnirea a fost facilitată de către Agenția pentru Dezvoltare Regională Nord-Est, care a prezentat în deschidere regiunea și activitățile ADR Nord-Est. Clusterelor membre TIM care au participat la întâlnirea online, respectiv SherBrooke Innopole (Canada), Action Innovation Network (SUA), iPark Shonan (Japonia), Bioga (Spania) și Slovenian Innovation [...]



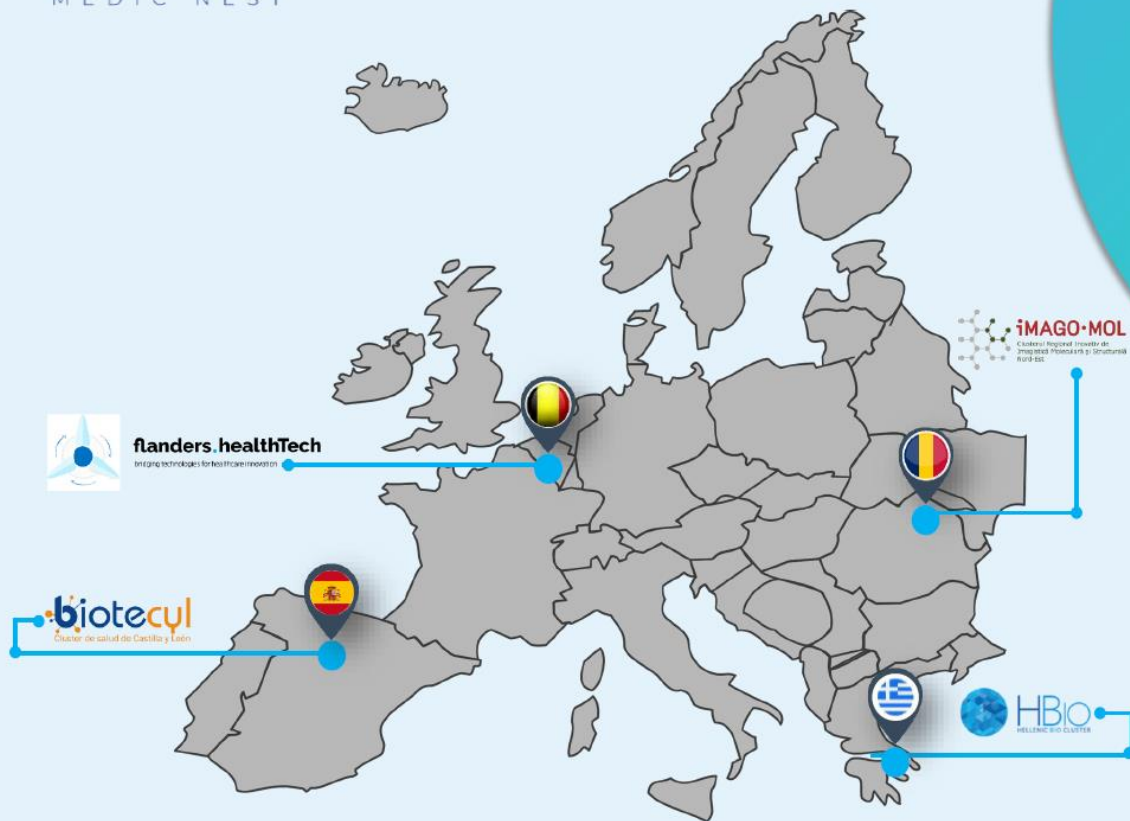
## "Hack the funding calls"

Clusterul IMAGO-MOL a organizat hackatonul online "Hack the funding calls" în data de 11 martie 2022. În cadrul evenimentului, echipele de lucru au fost invitate să dezvolte idei de proiecte, prin intermediul unor note conceptuale ce vor putea fi ulterior depuse spre finanțare în cadrul programelor europene disponibile. S-au format astfel 5 echipe interdisciplinare care au lucrat împreună la dezvoltarea unei note conceptuale pe baza metodologiei „project canvas”. Juriul acestui eveniment a fost format din [...]





Precision MEDicine Clusters  
integrating digital technologies for  
New EcoSystems in healthcare



FUNDER: European Cluster Excellence  
Programme with ClusterXchange scheme  
connecting ecosystems and cities (COS-  
CLUSTER-2020-3-03)

### CONSORTIUM



- 10<sup>th</sup> Imago-Mol Cluster (RO)
- 10<sup>th</sup> Hellenic BioCluster (GR)
- 10<sup>th</sup> Flanders.HealthTech(BE)
- 10<sup>th</sup> Biotecul Cluster (Leon Research) (ES)

TIMELINE: 24 months (starting: Feb. 1<sup>st</sup> 2022)



SCIENCE  
MEETS  
REGIONS



2022

#EUSCI4REGIO

# ACCELERATING DIGITAL TRANSITION IN HEALTH

*North-East Region of Romania*



RUBIK HUB, PIATRA-NEAMȚ  
JUNE 9TH - 10TH, 2022

VANGUARD INITIATIVE

*innovation camp event with representatives of the  
hospital managers, medical universities, researchers, public  
authorities, healthcare industry innovators*

Organiser: Alina Căpitanu, [acapitanu@admordest.ro](mailto:acapitanu@admordest.ro)

NCE  
TS  
ONS



2022

#EUSCI4REGIO

## DAY 1 - JUNE 9TH, 2022

0.00	Welcome coffee and speed networking
0.30	Opening session panel: <b>How to accelerate digital health advancements</b>  <i>Regional perspective:</i> Mr. <b>Vasile Asandei</b> , General Director North-East RDA  <i>National perspective:</i> Dr. <b>Tiberius Brădătan</b> , State Secretary, Ministry of Health Mr. <b>Julian Popescu</b> , State Secretary, Ministry of Research, Innovation and Digitalization Mr. <b>Dragos Vlad</b> , Romanian Authority for Digitalization, TBC  <i>EU perspective:</i> Mr. <b>Stijn Verleyen</b> , Coordinator Interinstitutional Relations, JRC Ms. <b>Farha Brahmi</b> , Network Manager, Vanguard Initiative Ms. <b>Jolien Roovers</b> , Smart Health Pilot, Vanguard Initiative  <i>Academic perspective:</i> Prof. <b>Viorel Scripcariu</b> , Rector, University of Medicine and Pharmacy, Iași TBC  <i>Healthcare provider:</i> Dr. <b>Lucian Eva</b> , "Prof. Dr. Nicolae Oblu" Emergency Clinic Hospital, Iași, TBC
1.30	<b>Digital health trends: Presentation of best practices</b>  Ms. <b>Verena Ossmann</b> , Lower Austrian Health Technology Platform Manager Ms. <b>Laure Rosa</b> , Murcia Region, CHERRIES Project (online intervention) Dr. <b>Ștefan Busnatu</b> , Innovation and eHealth Center, Bucharest Dr. <b>Ionuț Nistor</b> , Center for Innovation and Technology, MAVIS, Iași
2.00	<b>Participatory debate</b>
2.45	Networking lunch
3.00	<b>Presenting digital health technologies</b> Pitches: <b>Medtech</b> Solutions providers  Mr. <b>Vlad Gilga</b> , CEO Rubik Hub, moderator  Xvision, Synaptiq, EMIM – Romssoft, Skyermedical, CGM Software Romania
3.30	Coffee break
4.00	<b>The role of AI in medical diagnostics</b> Prof. <b>Adrian Iftene</b> , Medtech Coordinator of Imago-Mol Cluster, Dean of Computer Sciences Faculty, University Al. I. Cuza, Iași Mr. <b>Sergio Munoz</b> , Spanish Innovation Platform on Healthcare Technology Dr. <b>Marius Geantă</b> , Center for Innovation in Medicine, Bucharest Dr. <b>Alexandru Burlacu</b> , University of Medicine and Pharmacy, Iași
	<b>Participatory debate</b>

NCE  
ETS  
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2022

#EUSCI4REGIO

## DAY 2 - JUNE 10TH, 2022

0.30	<b>Funding opportunities for the uptake of digital health solutions</b>  Ms. <b>Alina Căpitanu</b> , North-East RDA
3.00	<b>Interoperability of the medical data at regional, national and European levels</b>  <i>Innovation camp</i> + challenge-based discussions between hospital managers, specialists, researchers, representatives of the healthcare industry, digital innovation hubs and public authorities  Mr. <b>Ion Cheorghe Petroval</b> , Freshblood, moderator Ms. <b>Bianca Muntean</b> , Transylvanian DIH, Cluj-Napoca, TBC Ms. <b>Carmen Mihal</b> , Imago-Mol Cluster, Iași Ms. <b>Cristina Baghiu</b> , Digital Innovation Zone, Iași Mr. <b>Ionuț Nistor</b> , Centre for Innovation and Technological Transfer MAVIS, University of Medicine and Pharmacy, Iași Mr. <b>Daniel Mocanu</b> , Skyer Medical Mr. <b>Adrian Tompea</b> , Product Architect, CGM Software Romania Mr. <b>Mihail Suchar</b> , Quartz Matrix
	<b>Solutions found for ensuring the interoperability of medical data</b>
3.30	<b>Participatory debate and conclusions</b>
4.30	Networking lunch

# POVEȘTI DE SUCCES PROIECTE DE INOVARE DIN DOMENII RIS3 NORD-EST

//////////

[Acasă](#) > [CE OFERIM?](#) > [Specializare inteligentă](#) > [Povești de succes proiecte de inovare din domenii RIS3 Nord-Est](#)**CONNECT  
NORD-EST**  
Asociația de Dezvoltare Regională

START PROMOTION CAMPAIGN

*Success stories*Successfully implemented projects in the fields of RIS3 North-East  
smart specialization domains

## PORTOFOLIUL SERVICIILOR

Planificare și programare  
regională

Dezvoltare urbană

Management programe de  
dezvoltare regionalăParteneriate strategice și  
cooperare externă

Specializare inteligentă

Managementul inovării și  
internționalizarea afacerilor

Pentru că ne plac ideile mărețe cu rezultate pe măsură, am inițiat o campanie de promovare a **poveștilor de succes** din Regiunea de Nord-Est, în domeniile de specializare inteligentă. Sunt multe povești de succes, idei complexe și oameni curajoși care fac din România un tărâm al speranțelor. Haideți să-i cunoaștem!



**Multifunctional ecosystem for the integration of self-management medical services (EMIM)**

## **RIS3 domain**

IT&C  
HEALTH

## **Specialization niche:**

Development of new ICT hardware & software products and testing solutions  
E-Health

## **Funding programme:**

**ERDF**

**Competitiveness  
Operational Program  
2014-2020**

Implementation period 2017-2020

## **Consortium:**

- RomSoft (project coordinator)
- DOHU Consulting



Integrated medical data management systems



Integrated online software calendar



În-browser and Android application



Medical information available online 24/7



**CONNECT  
NORD-EST**  
Accelerator de idei inovatoare



**RomSoft**



**DOHU  
consulting**



**EMIM**



**EMIM**

**Platforma online pentru  
medici, farmaciști  
și pacienți**

„Competitivi împreună”

Proiect cofinanțat de Fondul European de Dezvoltare Regională și Ministerul Sănătății, Cooperarea 2014-2020, Axis prioritară 1 - „Sănătate, Educație și Comunicare TIC” pentru o mobilitate digitală competitivă.



# PharmaLedger

## Blockchain-enabled healthcare

### Funding programme

Innovative Medicine Initiative (IMI)

- Horizon 2020
- European Federation of Pharmaceutical Industries and Associations (EFPIA)

2020 - 2022

### RIS3 domain

- IT&C
- HEALTH

### Specialization niche

- Development of new ICT hardware & software products and testing solutions, Traceability and BigData
- E-Health

### Consortia

- 10 countries, 29 partners - RomSoft (partner from Romania)

### Main objective

Building a trusted platform at all levels that supports the design and adoption of blockchain-based healthcare solutions while accelerating access to innovation that benefits the entire ecosystem, from manufacturers to patients.

The scalable blockchain platform will be validated through applications dedicated to specific reference areas - distribution chain, clinical trials, and medical data.



**CONNECT**  
**NORD-EST**  
Accelerator de idei inovatoare



RomSoft



**PharmaLedger**





**taRgeted thERapy  
for adVanced  
colorEctal cancerR  
paTients  
(REVERT)**

**RIS3 domain:**  
HEALTH & TIC

**Specialization niche:**  
Precision Medicine, Development  
of new ICT hardware & software  
products and testing solutions



**REVERT**

**Funding programme:**

Horizon 2020

SC1-BHC-02-2019  
*Systems approaches for  
the discovery of  
combinatorial therapies.*

**IMAGO-MOL cluster,**  
as an umbrella organization  
participating through the following  
members, third parties linked  
under the grant agreement:

- Technical University "Gheorghe Asachi" Iasi
- RomSoft SRL
- Euroclinic SRL Oncology Center (Victoria Hospital)
- "Spiridon" Emergency Clinical Hospital in Iasi



**Enhancing and  
Strengthening the  
Excellence in  
Interdisciplinary  
Biomedical Research at  
TRANSCEND  
(ESEI-BioMed)**

**Funding programme:**  
Horizon 2020

WIDESPREAD-2018-2020  
(WIDESPREAD-06-2020-  
ERA Chairs)

The only project currently  
underway in Romania and  
the second one won by  
Romania in this type of  
competition.

**RIS3 domain:**  
HEALTH

**Specialization niche:**  
Medical and Pharmaceutical  
Biotechnology, Precision Medicine

**The ambitious goal of the ESEI-  
BiOMed project is to develop  
and strengthen research and  
innovation in nanomedicine, by  
reorganizing the team formed  
of highly qualified and  
dedicated researchers,  
addressing research topics  
focused on the development of  
nanomaterials/nanoparticles  
for cancer diagnosis and  
therapy.**



**CONNECT  
NORD-EST**  
Accelerator de idei inovatoare



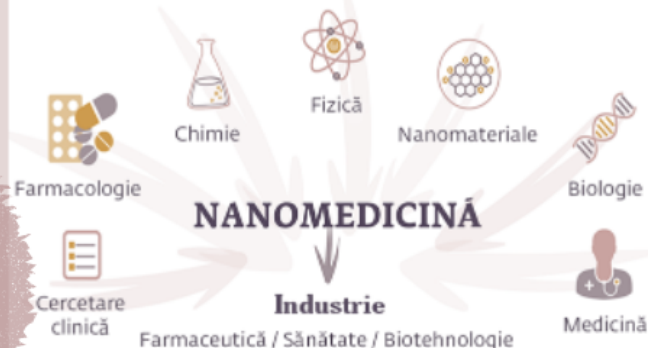
**TRANSCEND**



**ESEI-BiOMed**  
Nanomedicine for a better life



**ESEI-BIOMED**



- Improve **innovation in regional diagnostic and therapy infrastructure**
- Production of **innovative medical devices and tools**
- **Promote existent high value-added** products and new technologies
- **Increase production** of raw materials at the national level
- **Internal and external digitalization** of healthcare institutions
- **Development and deployment of eHealth** integrated computing systems to access a wide range of medical information
- **Population education for health:** developing and improving e-health services through a participatory approach to patients
- **Increase collaboration between different actors** in the sector (eg. TT)
- **Education, attraction, and retention of qualified medical staff** in the region (reduce labor migration)

## Partnership opportunities for the HEALTH sector







# Opportunities

## **The National Health Strategy 2020 – 2030**

includes measures dedicated to increasing access to personalized treatments for cancer patients, etc.

## **National Strategy for RDI and Smart Specialization 2021 – 2027**

includes Health and Life Quality as a national domain for smart specialization

## **North-East RIS3 2021 – 2027 - ROP (Axis 1)**

includes the Health sector, with medical and pharmaceutical biotechnologies, precision & prevention medicine, eHealth, and Biosecurity as main niches

## **Health Operational Programme 2021 – 2027**

Priority 5: Innovative approaches in medical research  
Priority 6: Digitization of the medical system  
Priority 7: Measures to support research, computerization in health, and the use of modern methods of investigation, intervention, treatment

## **National Program or Resilience and Recovery (for digitalization) Future National Plan for RDI IV .....**

+ a lot more opportunities at European level

## Bine ai venit pe Platforma TeRRitoria

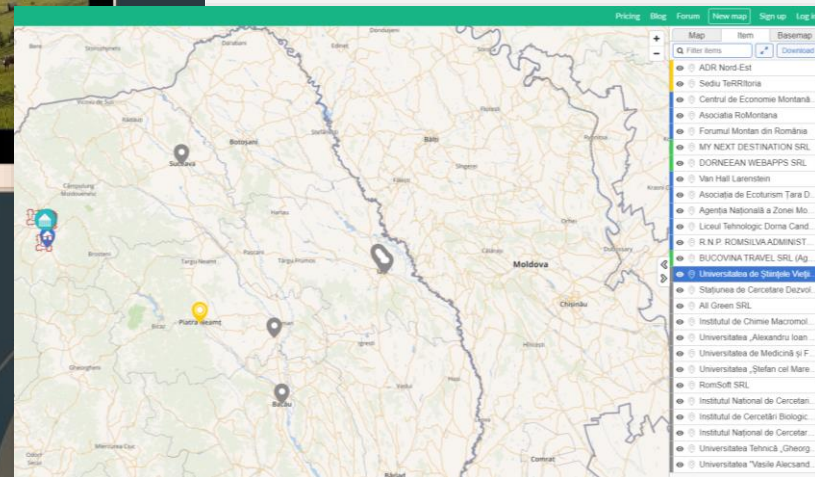
Esti interesat de o solutie inovativa pentru  
activitatea ta? Cauti un partener pentru un  
proiect de de cercetare-inovare?

HAI SA NE CUNOASTEM

# HAI SĂ NE CUNOAȘTEM!

26 mai 2022, 13.00 - 14.00  
Online, Platforma Zoom

Lansare platformă online, destinată brokerajului de servicii de  
cercetare, dezvoltare și inovare (CDI) în domeniile de  
specializare inteligentă a regiunii Nord-Est







THANK YOU  
FOR YOUR  
ATTENTION !

Simona Popa  
[simona.popa@adrnordest.ro](mailto:simona.popa@adrnordest.ro)



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Development Agency

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