

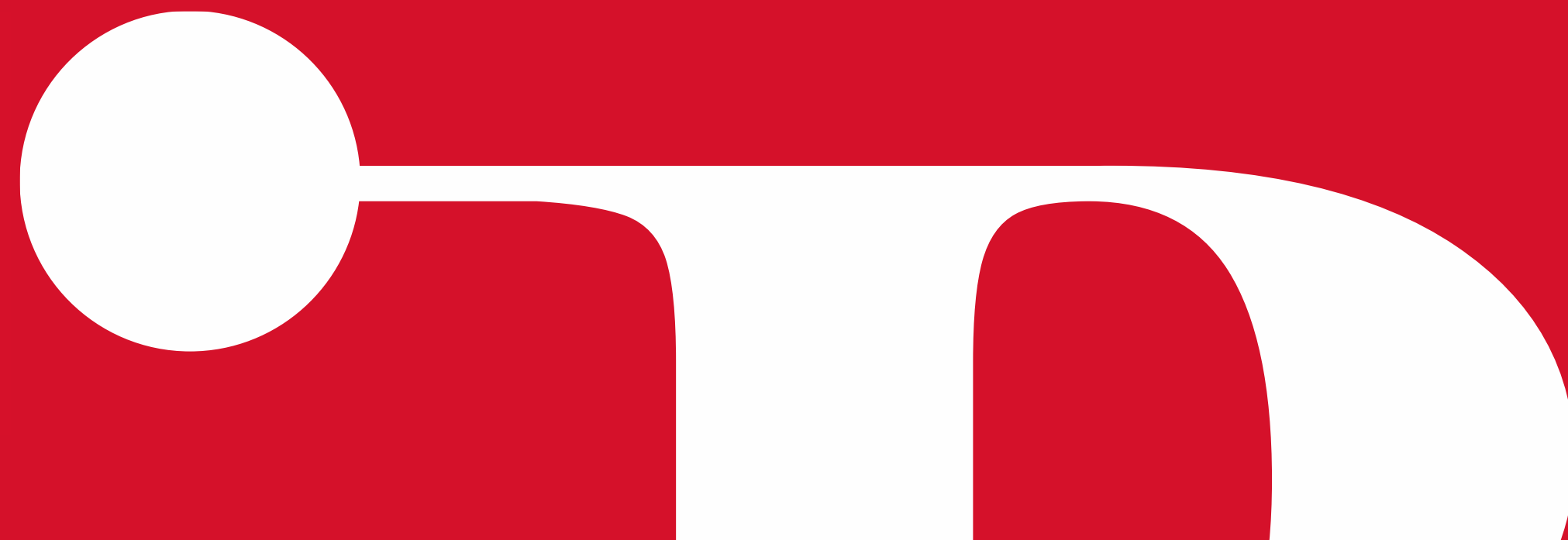


# Presentazione dei risultati del Bando ERC SEEDS UNIBA e avvio dei progetti di ricerca

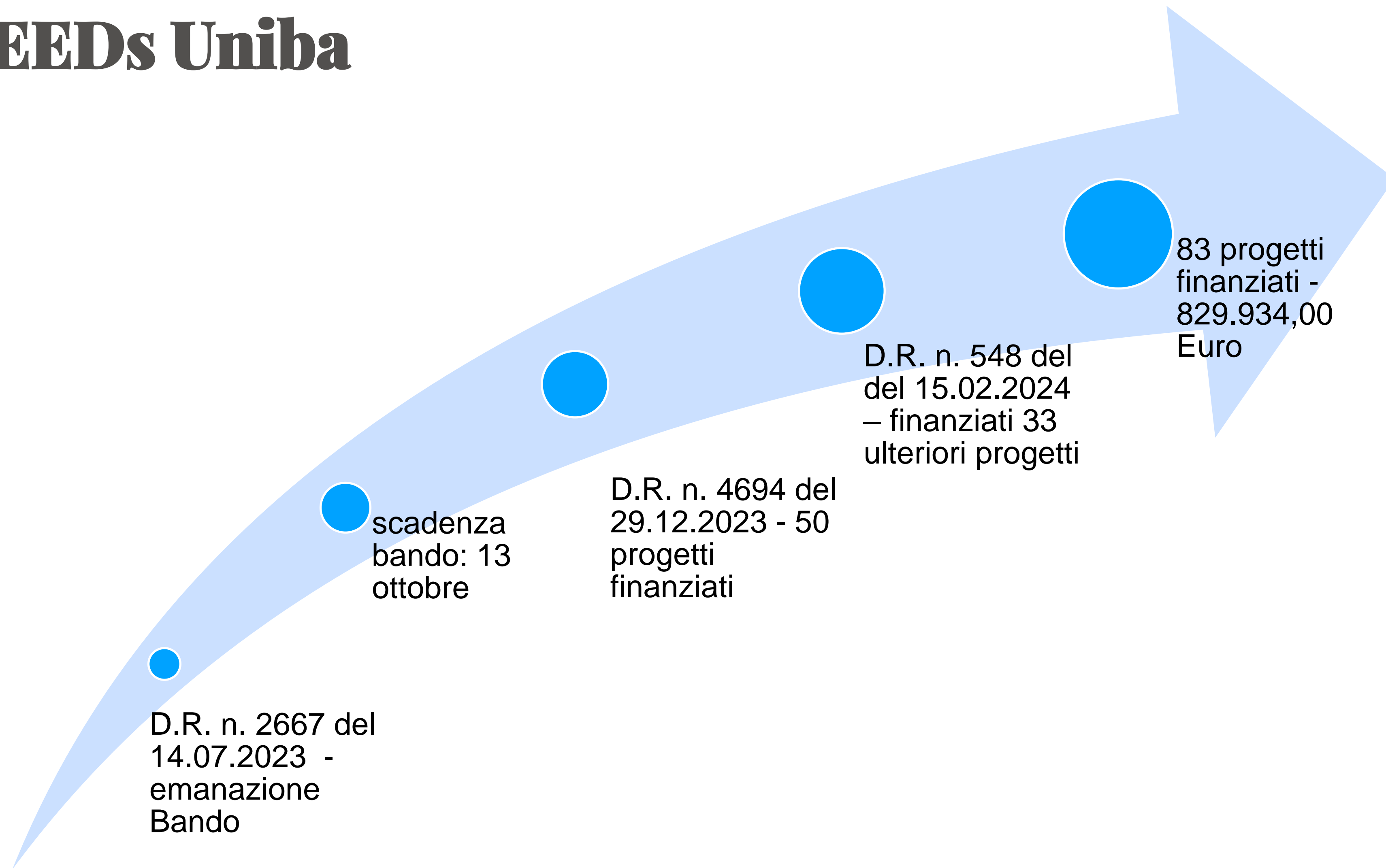
*Prof. Gianluca Maria Farinola – Delegato alla Ricerca ed innovazione*

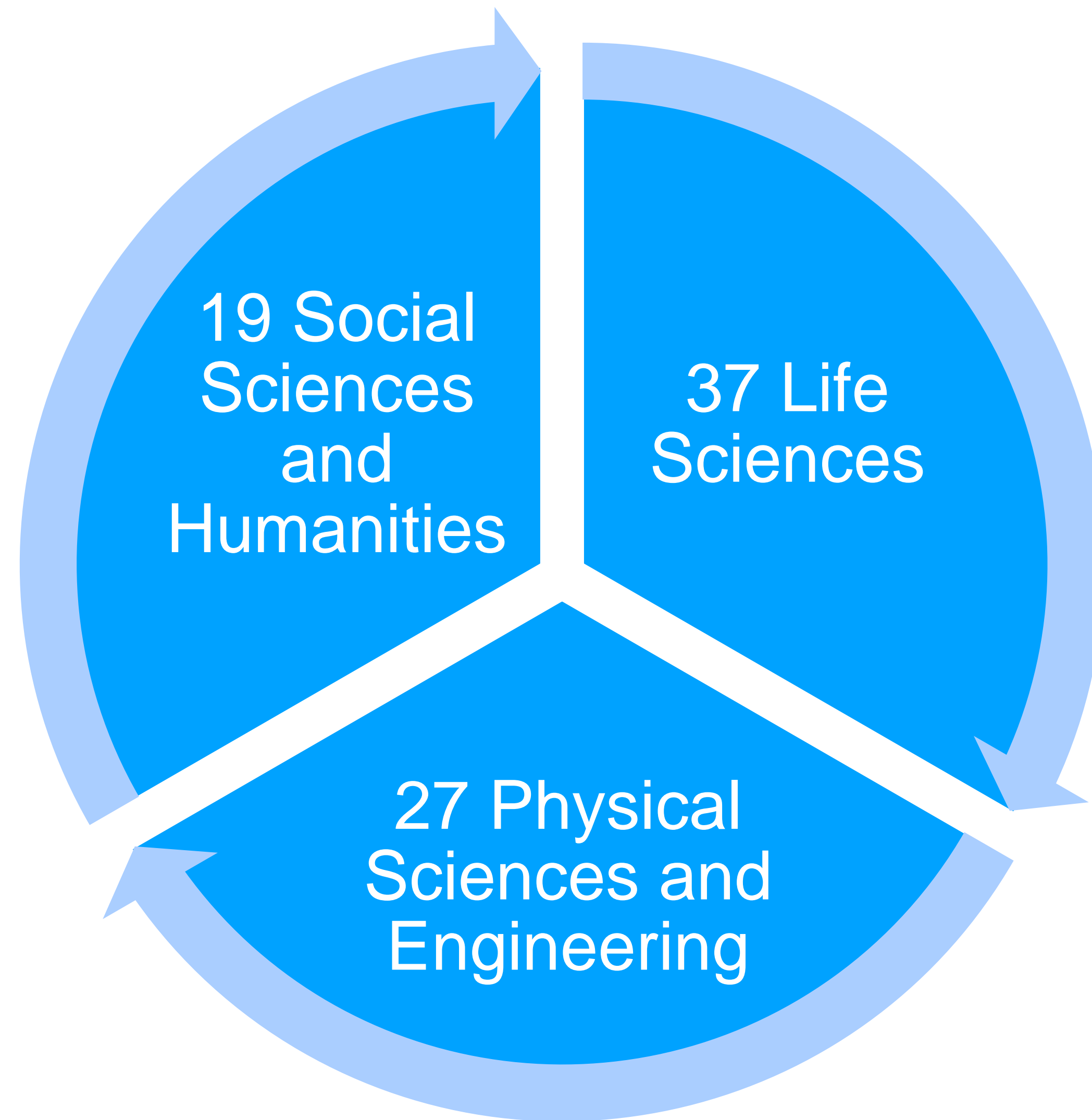
*Prof. Danilo Caivano – Responsabile della Linea di azione relativa alla Progettazione Europea*

**1 marzo 2024**



# ERC SEEDs Uniba





# ERC SEEDs Uniba – progetti per Dipartimento

## BIOMEDICINA TRASLAZIONALE E NEUROSCIENZE

D'Ambrosio Enrico	DT-4P	Digital Twins for Precision Psychopharmacotherapy and Physical health in Psychosis
Antonucci Linda Antonella	ACToReMark	Identification of psychological and behavioral predictors of the efficacy of an Acceptance and Commitment Therapy-based training in young help seekers: a machine learning study
Passiatore Roberta	IRIS	Interindividual variability of neural recruitment supporting cognition
Valente Onofrio	ASTROFIR3	Use of induced pluripotent stem cells derived astrocytes for the 3D modeling of Central Nervous System physiopathology

## BIOSCIENZE, BIOTECNOLOGIE E AMBIENTE

Centrone Mariangela	RAM	Studying Renal Cell Alterations in Microgravity to Develop Space Medicine of Tomorrow
Caponio Giusy Rita	VALORE	VALORIZATION of natural by-products of Orange waste: functional characterization of bioactive molecules for high nutritional gluten-fREE bakery products
Mastrorocco Antonella	3D FERTITOX	New challenges on FEMALE Reproductive Toxicity testing: 3D In vitro oocyte maturation systems for contaminant mixtures TOXicity evaluation
Lazic Tamara	AlienIMP	Alien species impact on biodiversity
Calia Carla	LEKART	Wild birds: Lesser Kestrel and its role in the spread of antimicrobial resistance and bacteria of clinical relevance
Laera Luna	OVATION	OVATION: a pipeline for studying Ovarian Cancer through integration, correlation and cell communication analysis in single-cell RNA sequencing data.
De Zio Roberta	IC-fhNSC	Electrifying Insights: Investigating Ionic Currents of Fetal Human Neural Stem Cells to Enhance Neurological Therapy
Trani Roberta	MaSBIA	Marine Sponges as Bioremediators in Integrated Aquaculture
Venuto Santina	FuncPVTinSCLC	Functional characterization of linear and circular PVT1 transcripts in Small Cell Lung Cancer

## CHIMICA

Mateos Cuadrado Helena	LAST FBI Investigation	Laser Induced Breakdown Spectroscopy (LIBS) Assay on lateral flow STRips of Ferritin Bound Iron investigation
Barbanente Alessandra	MELOGRANE	Bioinspired artificial metal-storage granules for zinc supplementation therapy
Izzi Margherita	REAL	More for less: REthinking Antimicrobial materials
Ventura Giovanni	Lipid7	Lipid7: Seven Steps for Lipid Discovery
Bianco Mariachiara	NOVAFIND	Novel Food Allergens Finder

## ECONOMIA, MANAGEMENT E DIRITTO DELL'IMPRESA

Intini Mario	URGE-NT	Urban Redesign for GrEen cities iN Transition
Bux Christian	GSCHospitals	Green supply chain management in the hospital catering service

## ECONOMIA E FINANZA

Foglia Matteo	CLIREFI	From crisis to resilience: A novel approach to Climate-Related Financial Risk
Moramarco Domenico	EOpSC	Equalizing opportunities in school choice
Ginex Giovanna	IDRG	Innovation in the documentation and representation of goods in the agri-food chain

## FISICA

Magnifico Giuseppe	TrailTN	Trailblazing Tensor Network methods for quantum systems
La Rocca Marianna	SMARTPTE	Scale-driven Methodology for Analyzing and Recognizing Post-Traumatic Epilepsy alterations
Gramegna Giovanni	UCQ	Unlocking Quantum Potential: Storage Capacity and Speed-Up in Quantum Neural Networks on NISQ devices
Maffei Maria	CALIDAE	Collisional atom-light dynamics and energetics
Pomarico Domenico	LGT&PHOTONICS	PHOTONIC DEVICES FOR REAL-TIME DYNAMICS OF THE THIRRING MODEL

**INTERDISCIPLINARE DI MEDICINA**

D'Oronzo Stella	SER-BM	Investigation of SERPIN B2 as a determinant of bone metastases: finding a new diagnostic market for breast and renal cell carcinoma patients
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**GIURISPRUDENZA**

Celentano Francesco Emanuele	MEWP	Mankind, Environment, Wildlife: 3 elements, one Planet
Gassi Vito	C.E.R.T.I.F.A.I.T.H	Certifications systems for Environment protection by Religions and Territory Institutions for warranty of Freedom of worship through Actions of Innovation for legal Templates that respect Holy rules
Lopopolo Susanna	O&RNDA - IPRs	Opportunities and risks of NFT, DLT and AI in managing IPRs
Dell'Atti Luca	HOPE	Heightening Online Participation in Europe. A Comparative Study on E-participation Tools to Promote Subsidiarity and Accountability

**FARMACIA E SCIENZE DEL FARMACO**

Colella Marco	FlashPhotoFlow	Merging Flash Chemistry and Photoredox Catalysis in Continuous Flow: Integrated Polar-Radical Linchpin Coupling Strategy towards Molecular Complexity
Rullo Mariagrazia	D.E.L.T.A.	The emotional impact of living with memory loss: discovery of Ephexin5 ligands as novel therapeutic approach to improve quality life in AD patients
Racaniello Giuseppe Francesco	PROMETEO	PROduction of Mucoadhesive ThiomEr-based Oral films by Direct Powder Extrusion 3D printing for topical treatment of buccal mucosal injuries
Trisciuzzi Daniela	EDIPO	Enhanced De novo Intuitive design of PrOtein-protein interaction modulators
Miciaccia Morena	HoPe	Exploitation of the binding mechanism between mitochondrial protease ClpP and new fluorescent ligands for treatment of pediatric Diffuse Midline Glioma
Arduino Ilaria	MEDUSA	Microfluidic development of biomimetic lipid nanoparticles for homologous-targeting and enhanced therapy against glioma
Ghafir El Idrissi Imane	(AMABrain)	Novel Multi target Approach to manage Nueroinflammation in the Brain
Silvestri Teresa	NEURONE	Neuroinflammation Therapy via Lipid Nanoparticles Formulation through Microfluidic Techniques
Brunetti Leonardo	RENEW_FPR2	RESolving NEuroinflammation With FPR2 Biased Agonism
Boccanegra Brigida	UNVEIL – DMD	Uncover novel epigenetic regulators as diagnostic and therapeutic players in Duchenne muscular dystrophy



**INFORMATICA**

Andresini Giuseppina	AI-CREED (Artificial Intelligence for Cybersecurity Robustness through Explainability and Adversarial learning)	Enhancing Robustness in Artificial Intelligence for Cybersecurity through Explainability and Adversarial Learning
Zaza Gianluca	EXPLICIT	application of EXPLAINABLE artificial intelligence principles in healthcare
Pasquadibisceglie Vincenzo	PROMETEO	Predictive Process Monitoring in the Era of The data-centric AI world

**JONICO IN SISTEMI GIURIDICI ED ECONOMICI DEL MEDITERRANEO: SOCIETA', AMBIENTE, CULTURE**

Deleonardis Nicola	T.U.R.B.O. - Trade Unions Research Best Outplacement	Trade unions in the labour market: training and outplacement for decent work
Di Capua Rosa	NALCIDAL	Development of a "National Inventory (LCI) Database of Agri-food and Livestock supply chains"

**MATEMATICA**

Griseta Maria Elena	CAVNA	C*-algebras and von Neumann algebras in Quantum Probability
Esposito Flavia	BILORa	Biomes data Integration with Low-Rank models
Palmieri Alessandro	NWEinNES	Nonlinear Wave Equations in Not Euclidean Settings

**MEDICINA DI PRECISIONE E RIGENERATIVA E AREA JONICA**

Saltarella Iliaria	IPSC4MUSCLE	Patient's derived induced Pluripotent Stem Cells (iPSCs) for muscle channelopathy modelling and pharmacological screening in the era of personalized medicine
Di Bari Ighli	NT-PKD	New tool for predicting prognosis in Autosomal Dominant Polycystic Kidney Disease
Stabile Marzia	FCVvent	Flow controlled ventilation: a suitable ventilation strategy for the treatment of the acute respiratory distress syndrome.
Desantis Vanessa	SMILES	Advancing knowledge on dysregulated endothelial Metabolism in atherosclerosis: effect of red wine extract components
Altamura Concetta	TargetIon	Therapeutic strategies targeting ion channels in Pancreatic Ductal Adenocarcinoma



## MEDICINA VETERINARIA

D'Ingeo Serenella	AGGHuDo	Advancing cognitive and behavioral understanding of aggression: comparative data from dogs and humans
Mendoza Roldan Alfonso Jairo	LBP: Leishmaniasis breaking paradigms	Leishmania vs Sauroleishmania: breaking paradigms of mammal and reptilian leishmanias
Capozza Paolo	NFDHAC	New frontiers in diagnosis of humans and animal coronaviruses
Diakoudi Georgia	Animal Virome 2.0	Next-generation sequencing-based investigation of animal virome – One Health perspective
Rhimi Wafa	YWA: Yeast of wild animal	The role of wild animals in carrying and spreading zoonotic yeasts including Candida auris
Cavalera Maria Alfonsa	HAI-VET-1HP	Healthcare-associated infections in Italian veterinary facilities and sanitization protocols: finding the perfect match in a One Health prospective
Cicarelli Stefano	DE.BLO.PLA.S.T.	DETECTION AND QUANTIFICATION OF PLASTIC PARTICLE POLLUTION IN BLOOD OF SEA TURTLE (CARETTA CARETTA) ON THE ADRIATIC SEA
Mottola Anna	SAFEST	Shotgun metagenome for complex seafood traceability

## RICERCA E INNOVAZIONE UMANISTICA

De Bari Mauro	GAMEX BOOK	GaMing Approaches for Engaging BOOK eXperiences
Lombardi Antonio	LEAF	Linking Evolution, AI and Freedom

## SCIENZE DEL SUOLO, DELLA PIANTA E DEGLI ALIMENTI

Difonzo Graziana	ESSENTIAL	Unravelling potential and drawbacks of durum wheat by-products: new ingredients for traditional foods
De Angelis Davide	EU PLAN(T)-B	Developing a sustainable, safe and advanced European plant-based supply chain exploiting the European grains and legumes biodiversity
Vacca Mirco	PEC 4 FRESH	Probiotics-enhanced Edible Coating for Freshly portioned Ready-to-Eat fruits: a Sustainable and Healthful innovation
Natrella Giuseppe	SAFE CHEESES	biogenic amine evaluation in different Apulian CHEESES
Yaghoubi Khangahi Mohammad	Interaction of Endophytic Bacteria and Host Plant	Benefits from the Interaction of Endophytic Bacteria and Host Plant: Functional Analysis in the Leaves Growth Zone and the Roots Exudation System of Wheat under Drought and/or Nutrient Deficiency
Palmitessa Onofrio Davide	CHLOROFEED	Biofeedback system based on chlorophyll fluorescence to increase light use efficiency of vegetable crops



**SCIENZE DELLA FORMAZIONE, PSICOLOGIA, COMUNICAZIONE**

Mangiulli Ivan	FORGET-ME-NOT	The Impact of Intentional Forgetting on False Memory Formation
Battista Fabiana	CIPV-SAFE	Cyber Intimate Partner Violence - Securing A Fearless Environment
Delussi Marianna	ANNS-Protocol	Aging, Neurodegeneration and neuroenhancement: standardisation of SNT rTMS protocol

**SCIENZE POLITICHE**

Gahn Santiago José	HEAT-D3	Demand Disruption Dynamics: Exploring Hysteresis Effects on Inflation, Accumulation and Technological Advancement in the US Economy
Mazza Rocco	S.C.E.NA.RI.O.	predictive analySis of urban poliCy nEeds in sceNarios of demogRaphic transformatiOn

**SCIENZE DELLA TERRA E GEOAMBIENTALI**

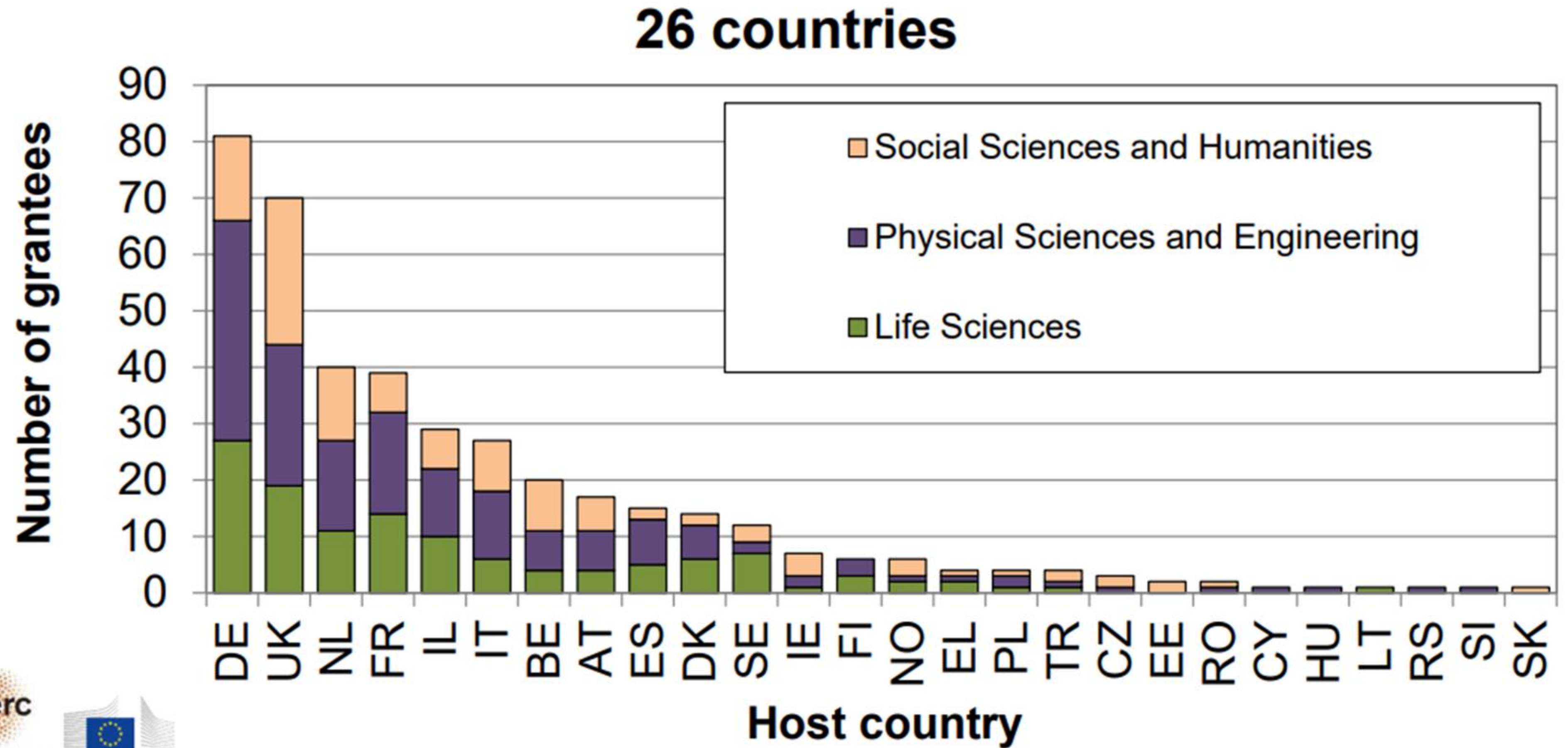
Scardino Giovanni	HOME-COAST	Get aHead Of the MEDicanes: strategies for the COASTal environment
Natale Jacopo	3VOLCO	Investigating the 3-dimensional Evolution of Volcanic Collapse
Neglia Francesco	VOLCURE	Investigating the triggering and dynamics of volcaniclastic granular flows by combining numerical modelling, large scale experiments and field data
Liso Isabella Serena	MIRKA	Mitigation of Risks in coastal Karst
Zingaro Marina	DEMETRA	DEMETRA. Innovative approach to support soil pollution monitoring through better unDERstanding of contaminated sediMent TRAnsport processes
La Salandra Marco	AEU4H	Artificial Intelligence and Edge Computing-based UAV: the new complementary approach to face natural hazards



## Submitted and selected proposals by Domain (ERC Starting Grants 2022)

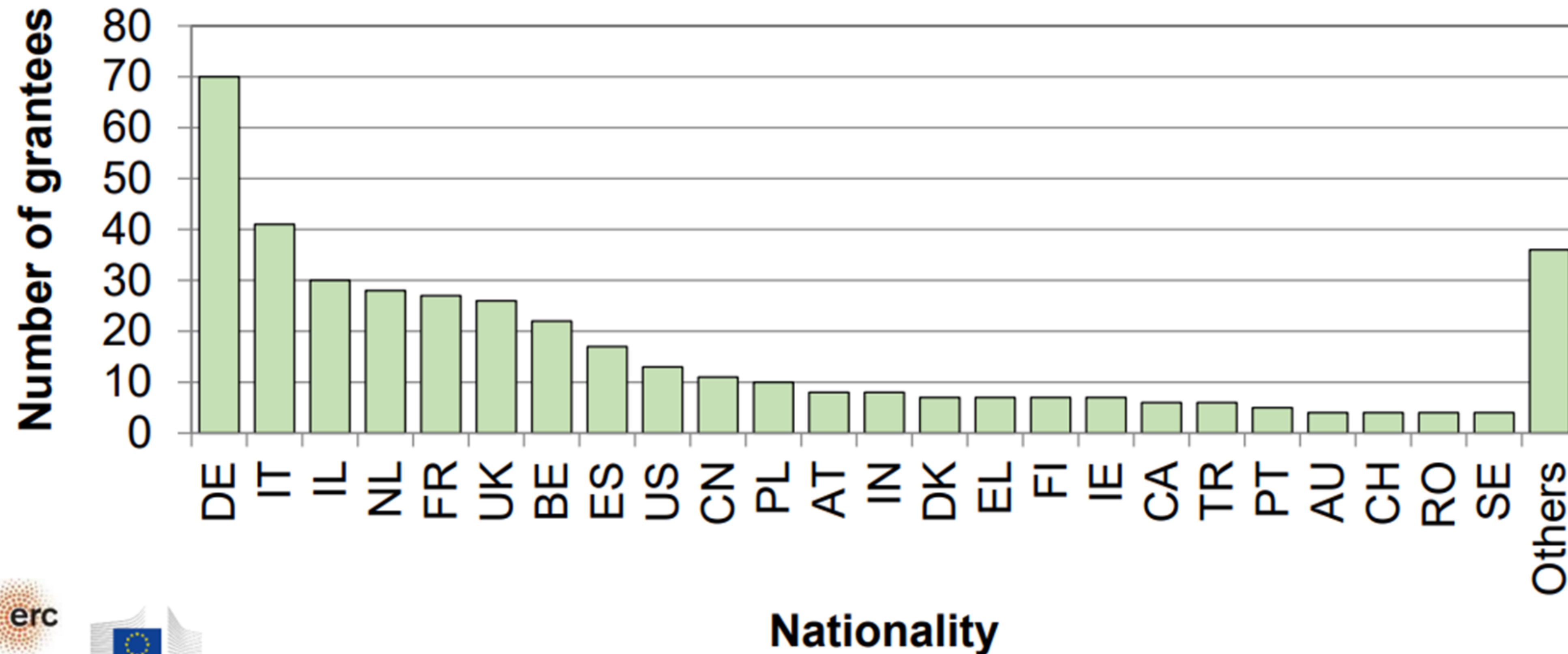
	Submitted Proposals	Selected Proposals
Life Sciences	860	124
Physical Sciences and Engineering	1224	168
Social Sciences and Humanities	848	116
<b>TOTAL</b>	<b>2932</b>	<b>408</b>
<b>Success rate ~ 13.9 %</b>		

# Grantees by Country of Host Institution and Domain (Total 408 grants)

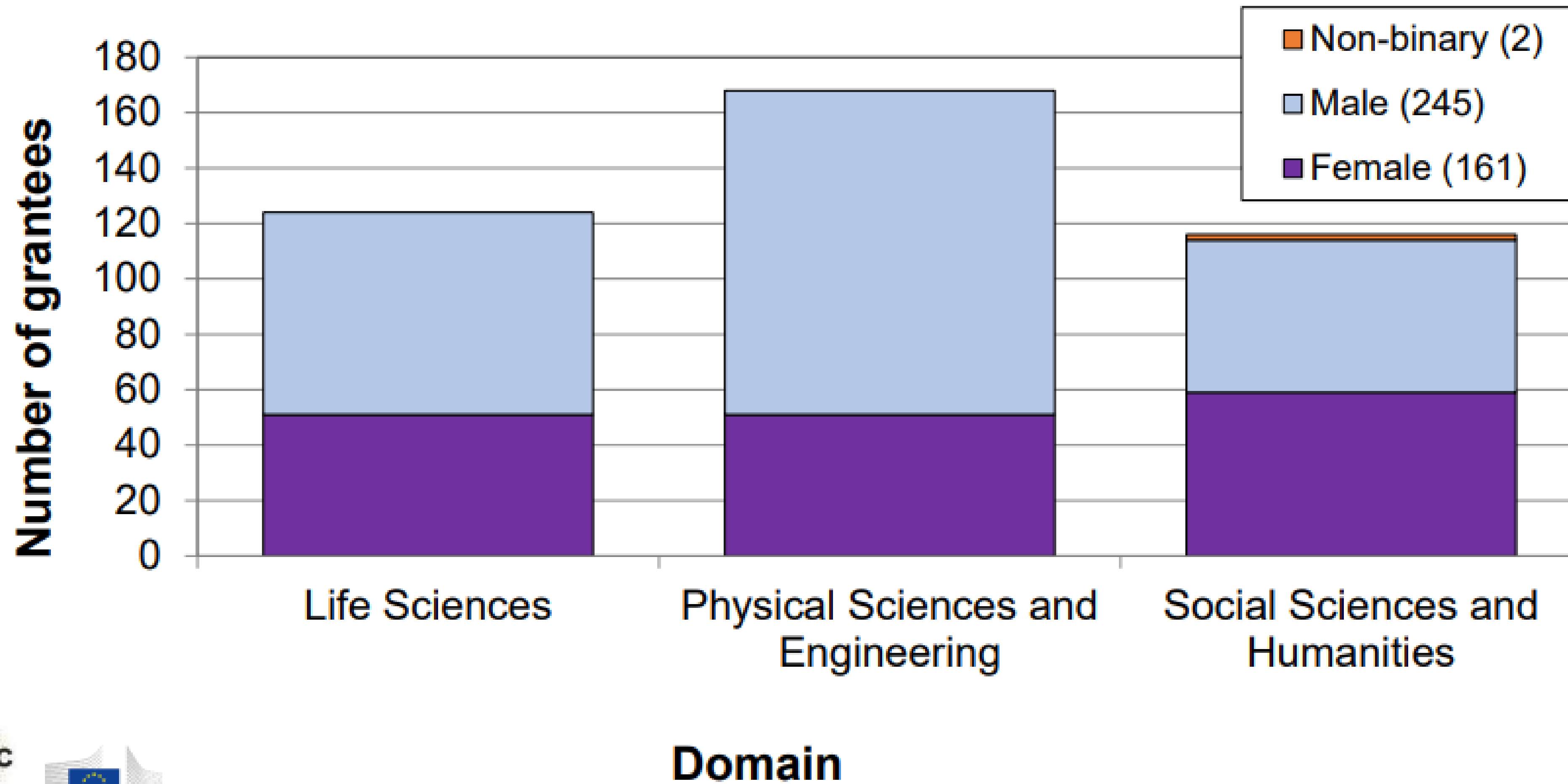


# Grantees by Nationality (total 408 grants)

46 nationalities



# Grantees per domain and sex (total 408 grants)



# Number of Italian Proposals (all signed ERC Starting grants until 28/3/2023)





ERC SEEDS UNIBA -  
CANDIDATURA ERC  
STARTING GRANT

## ERC STARTING GRANT

- Duration up to 5 years
- Funding up to 1,5 M€
- Max 2,5 M€ per project\*

\*In exceptional and well-specified cases: up to 2.5 M €

- PI from third country
- Purchase of major research equipment
- Access to research infrastructure



# Eligible Principal Investigator WP 2025 ( indicative)

Starting Grant	Consolidator Grant	Advanced /SynergyGrant
<p>&gt; 2 and ≤ 7 years</p> <p>prior to 1 January 2025</p> <p>Cut-off dates: PhD awarded from 1 January 2018 to 31 December 2022 (inclusive)</p>	<p>&gt; 7 and ≤ 12 years</p> <p>prior to 1 January 2025</p> <p>Cut-off dates: PhD awarded from 1 January 2013 to 31 December 2017 (inclusive)</p>	<p>No specific criteria</p>

## Profilo di un Principal Investigator ERC Starting Grant

A competitive Starting Grant Principal Investigator must have already shown the potential for research independence and evidence of maturity, for example by having produced **at least one important publication as main author or without the participation of their PhD supervisor.**

## Principal Investigator: cosa è richiesto

- at least one important publication as main author or without the participation of their PhD supervisor.

Other elements of evaluation:

- Research achievements
- Peer recognition

### RESEARCH ACHIEVEMENTS AND PEER RECOGNITION

#### **Research achievements**

[Provide a list of up to ten research outputs that demonstrate how you have advanced knowledge in your field with an emphasis on more recent achievements, such as publications, articles deposited in a publicly available preprint server, books, book chapters, conference proceedings, data sets, software, patents, licenses, standards, start-up businesses or any other research outputs you deem relevant in relation to your research field and your project.]

*You may include a short, factual explanation of the significance of the selected outputs, your role in producing each of them, and how they demonstrate your capacity to successfully carry out your proposed project.]*

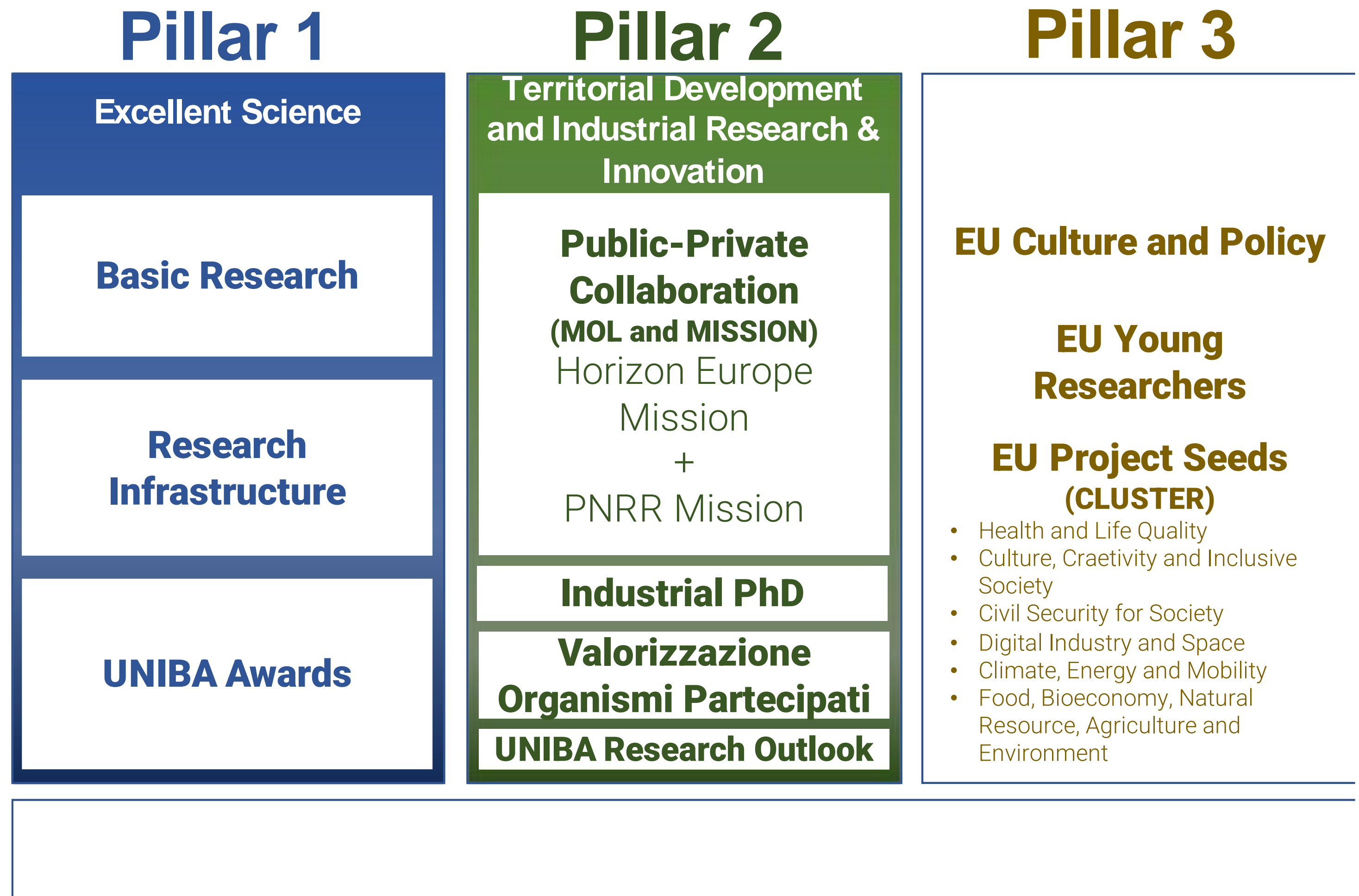
#### **Peer recognition**

[Provide a list of selected examples of significant recognition by your peers if applicable, such as prizes, awards, fellowships, elected academy memberships, invited presentations to major conferences or any other examples of significant recognition you deem relevant in relation to your research field and project.]

*You may include a short explanation of the significance of the listed examples.]*

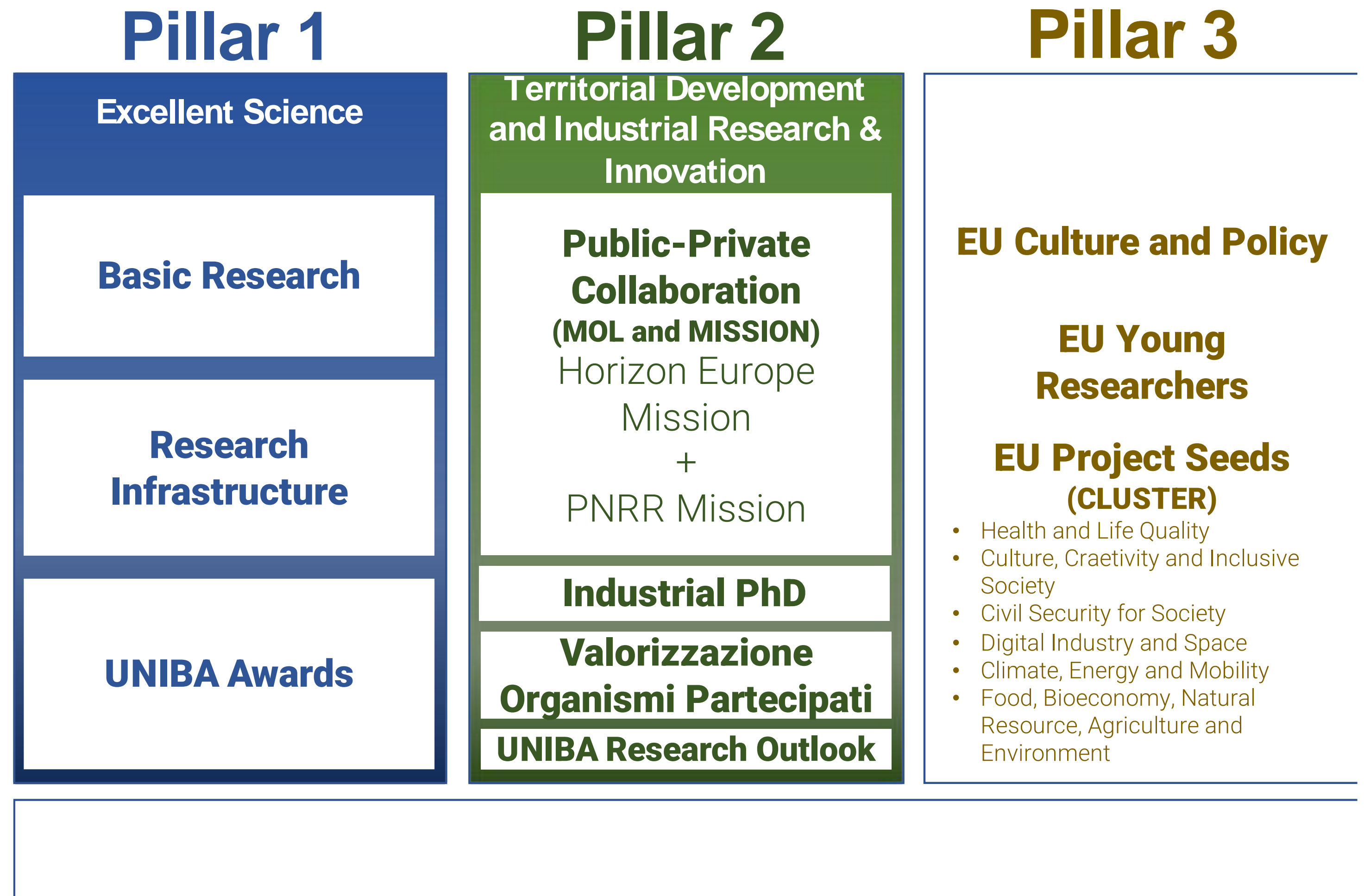
# La Strategia UNIBA

**Excellence Science:** accrescere la produttività scientifica ovvero la quantità e la qualità dei prodotti della ricerca, ridurre il numero di ricercatori inattivi, potenziare e supportare la ricerca di eccellenza



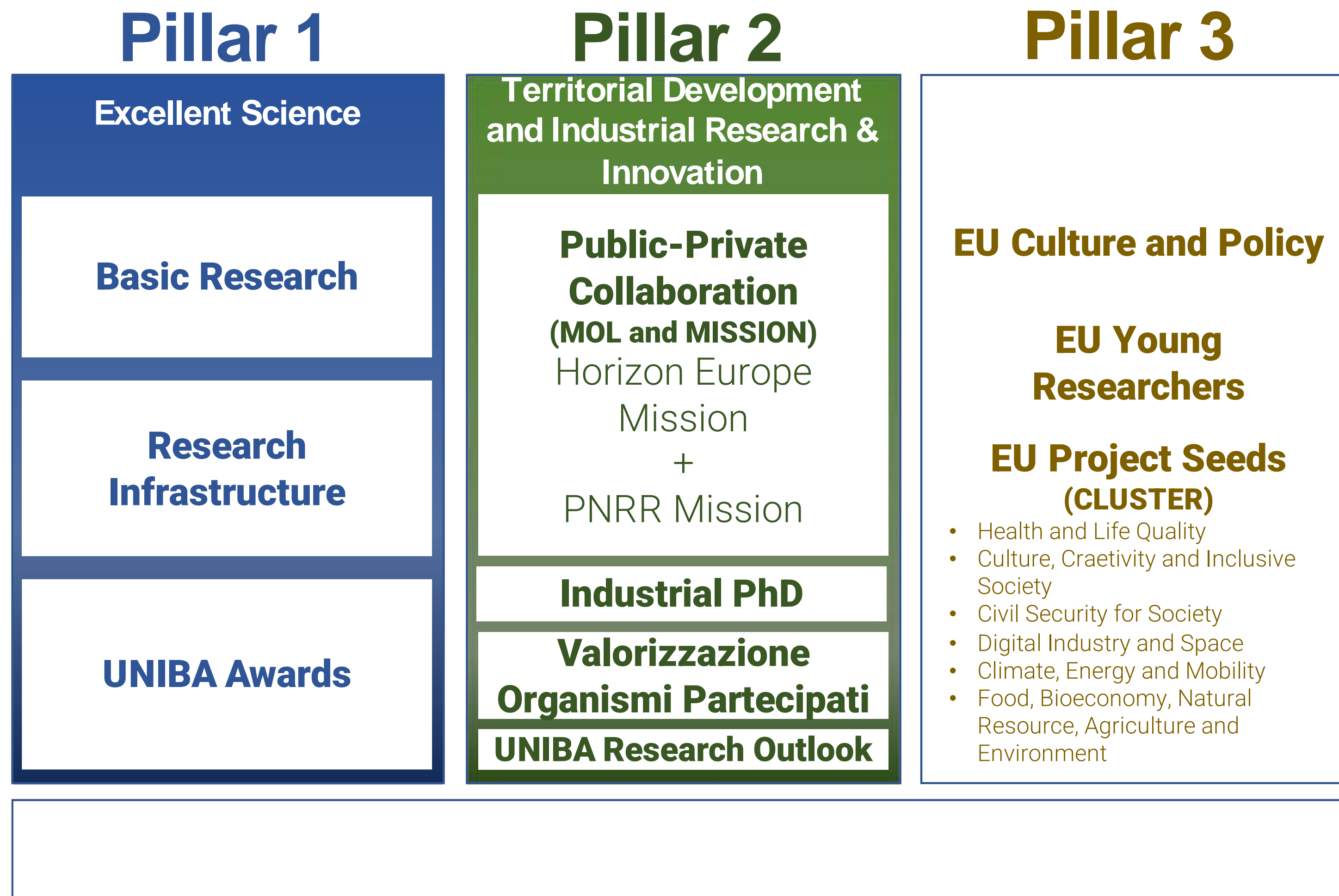
# La Strategia UNIBA

*Territorial Development and Industrial Research & Innovation:* avviare processi di contaminazione virtuosa e sinergie pubblico-privato capaci di trasformare UNIBA in uno dei motori dello sviluppo territoriale



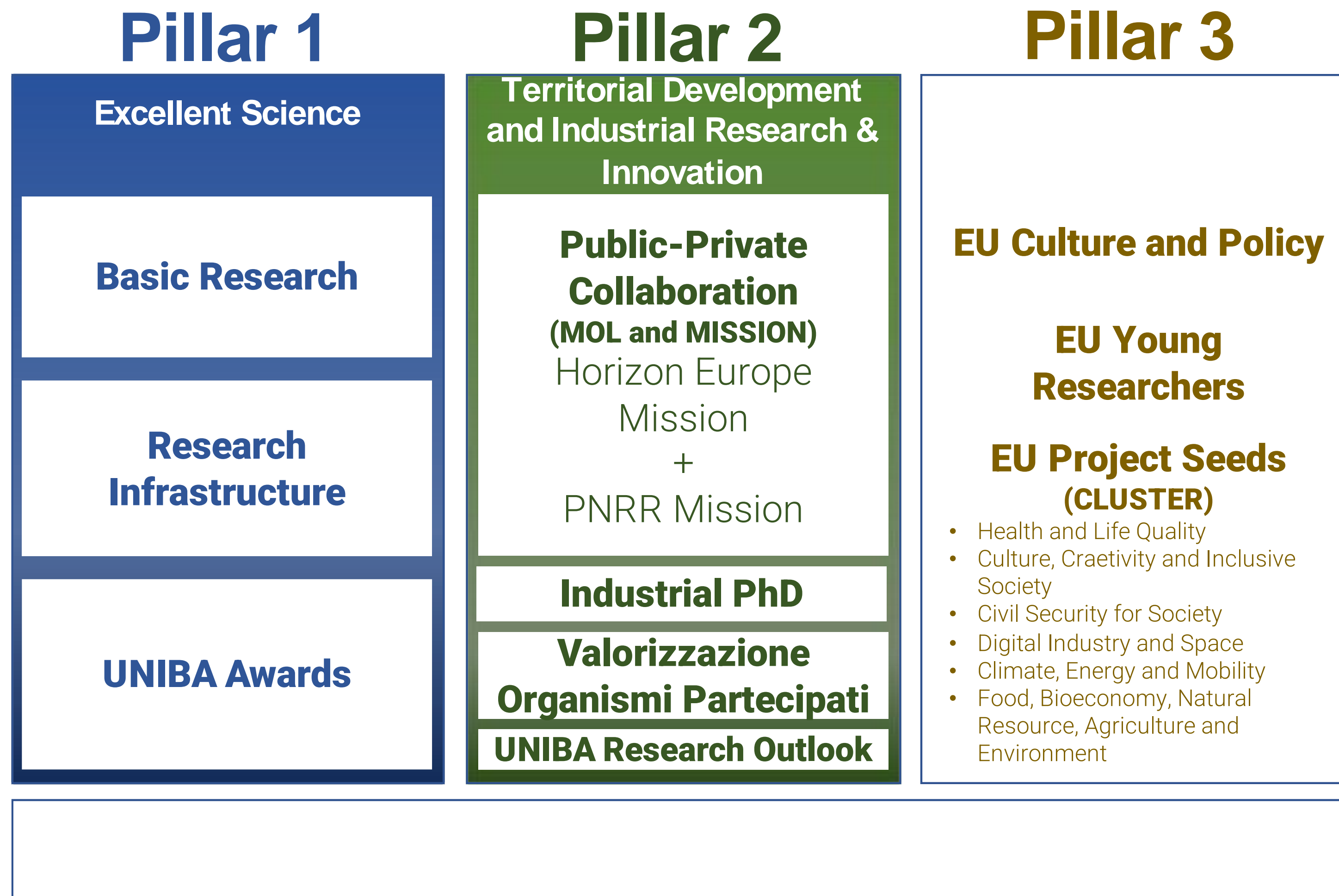
# La Strategia UNIBA

*European Excellence:* divenire protagonisti della ricerca europea. Potenziare il dialogo con gli uffici di Brussels, garantendo una presenza UNIBA dove si costruiscono le visioni e gli strumenti della ricerca europea.



# La Strategia UNIBA

*Cross-Cutting Collaboration, Gender Policy and Sustainability:* un tratto comune è far sì che le varie aree, gruppi di ricerca e singoli ricercatori collaborino. Altri elementi fondanti dell'azione UNIBA sono le politiche di genere e la sostenibilità che connoteranno ciascuna delle iniziative



*Grazie.*

