



Direzione Ricerca,
Trasferimento tecnologico e Terza Missione
Università degli studi di Modena e Reggio Emilia - UNIMORE

Azioni preparatorie e di supporto per la partecipazione a Horizon Europe

Barbara Rebecchi

Camerino, 6 novembre 2019

Mission oriented lens

- Strategie volte a risolvere sfide sociali e/o tecnologiche concrete
- Approccio sistematico alle strategie industriali e di innovazione
- Interazione tra più attori
- Capacità di elaborare politiche ambiziose dal lato della domanda per modificare il presupposto e il comportamento di investimento
- Programma di crescita industriale e verde
- Rafforzare il ruolo degli investimenti pubblici

Mission oriented internal process

R&I Missions

Migliorare in maniera decisiva la correlazione tra la ricerca e l'innovazione dell'Unione europea e le esigenze della società e dei cittadini, verificandone l'impatto reale

Una mission è un pacchetto di azioni trasversali a tutte le discipline volte a raggiungere un obiettivo audace e misurabile entro un lasso di tempo stabilito, con impatto evidente per la società, volto a influenzare il processo decisionale. Deve inoltre avere rilevanza per una parte significativa della popolazione europea e di cittadini europei.

Horizon Europe definisce le caratteristiche e gli elementi di governance delle 5 missions.
Missions specifiche saranno programmate nell'ambito di Global Challenges e di Innovation Europe

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Camerino, 6.11.2019

Adaptation to climate change, including societal transformation



**Healthy
oceans,
seas,
coastal and
inland
waters**



Mission areas



Cancer

Climate-neutral
and smart cities



**Soil health
and food**

Mission oriented internal process

- climate - neutral and smart cities
- healthy soil and food
- healthy oceans
- climate change
- cancer



New approach to European Partnerships

Una nuova generazione di partenariati orientati agli obiettivi e più ambiziosi
sostegno agli obiettivi politici concordati dell'UE

Key features

- Architettura semplice e semplici regole
- Approccio coerente del ciclo di vita
- Orientamento strategico

Co-programmato

Sulla base di Memorand of Understanding / accordi contrattuali; attuato in modo indipendente dai partner e da Horizon Europe

Cofinanziato

Sulla base di un programma comune concordato e attuato dai partner; impegno dei partner per contributi finanziari e in natura

Istituzionalizzato

Basato su una dimensione a lungo termine e sulla necessità di un'elevata integrazione; partenariati basati sugli articoli 185 / 187 di TFEU e il regolamento EIT-sostenuto da Horizon Europe

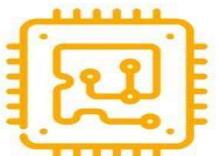
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**Health
innovations**



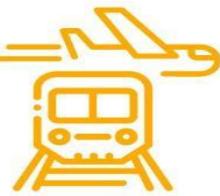
**Key digital
and enabling
technologies**



Metrology



**EU air
traffic,
aviation
and rail**



**Areas for possible
Institutionalised
European
partnerships (based
on Article 185/7 TFEU)**



**Sustainable
bio-based
solutions**

**Hydrogen and
sustainable
energy
storage**

**Clean,
connected
mobility**

**Innovative
SMEs**

Mission oriented internal process

- Mappare le competenze interne all'ateneo, i network attivi intorno alle tematiche di ricerca e i rapporti con il territorio.
- Rafforzare e consolidare il ruolo di UNIMORE in Europa
- Costruire proposte progettuali di successo



Ambiti tematici e reti in UNIMORE



Gruppi interdisciplinari di
ricerca di ateneo

Direzione Ricerca



ART. 36

UNIMORE

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Tavoli tematici e Missions

UNIMORE's background knowledge in climate sector:

- High-efficiency energy transition for European cities;
- Fuel cells and Hydrogen
- New smart materials for the storage and production of clean, sustainable energy;
- Energy efficient buildings;
- Safety in vehicle mobility;
- Smart interconnected mobility.
- Resilience and disaster management;
- Social impacts onn climate changes and migrations;
- Demographic sustainability (in Europe) - Measures to preserve/increase fertility/fecundity

Climate-neutral and smart cities Mission:

- Climate change mitigation and adaptation;
- Air quality;
- Spatial planning;
- Energy efficient buildings
- Urban infrastructure and network;
- Transport and logistic systems;
- ICT and water;
- Clean energy transformation;
- Public health;
- Urban resilience;
- Social impacts of climate changes

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Tavoli tematici e Missions

UNIMORE's background knowledge in agrifood sector:

- Food for a healthy life;
- Food production facing climate changes;
- Introducing circularity into the food value chains to reach zero waste;
- Non-food production from agriculture;
- Food security (safe and healthy) for all people;
- Remote management for the value chains in agrifood.
- Soil and Crop management
- Pests management
- New Bio-based products
- Circular solution for agrifood waste

Healthy soil and food Mission:

- Soil management in agriculture and forestry for food and nutrition security;
- Non-food products and public goods;
- Soil management beyond agriculture and forestry;
- Soil management practices for climate mitigation and adaptation;
- Sustainable land management;
- Agroecology;
- Soil microbiology

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Tavoli tematici e Missions

UNIMORE's background knowledge on oceans and environment:

- Introducing circularity into the food value chains to reach zero waste;
- Critical raw materials scarcity - innovative solution;
- (Hazardous) Waste reuse with a circular economy approach;
- New material from agrifood industry;
- Materials modelling;
- Acquaculture and new processes.

Healthy oceans, seas, Coastal and inland waters Mission:

- Systemic solution for the prevention, reduction and mitigation of marine pollution including plastic;
- Transition to a circular and blue economy;
- Public awareness rising;
- User affected by the need to adapt to and mitigate pollution and climate change;
- Development of new materials including biodegradable plastic substitutes;
- New feed and food.

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Tavoli tematici e Missions

UNIMORE's background knowledge on climate change

- Resilience and disaster management;
- New material from agrifood industry;
- Food production facing climate changes;
- Climate change mitigation and adaptation;
- Social impacts on climate changes and migrations;
- Circular solution for agrifood waste

Adaption to Climate change including societal transformation Mission:

- Climate change adaptation and mitigation;
- Climate services;
- Natural resources;
- Systemic and nature based solutions;
- Sustainable production and consumption;
- Disaster risk reduction;
- Water management;
- Biodiversity;
- Agriculture.

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Tavoli tematici e Missions

UNIMORE's background knowledge on cancer

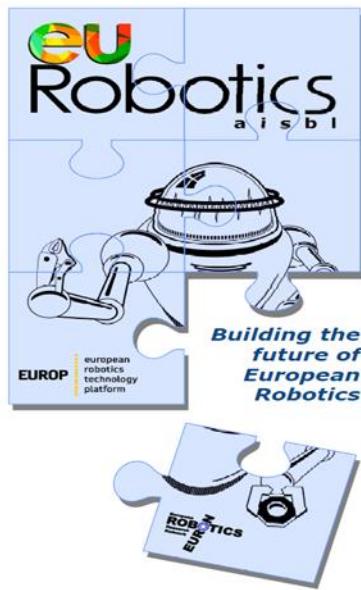
- Innovative and technological health care solutions for diseases having high societal impact;
- Healthy Diet as preventive medicine;
- Environmental & Physiological monitoring for health & safety;
- Biomarker identification, early diagnosis and advanced bio-imaging for pre-/clinical application by biosensor technologies and big data analysis;
- Precision/Personalized medicine & nanomedicines;
- Regenerative & genomic medicine;
- Biomedical devices & Biomaterials.

Mission area for Cancer

- Cancer prevention, prediction , detection diagnosis and treatment including clinical expertises;
- Quality of life and end of life care;
- Public health policy and practice;
- Patient representation including support groups and family counselling;
- Innovation on business development;
- Ethics.

Strategie → Networks

Factories 4.0 and Beyond



FUEL CELLS AND HYDROGEN
JOINT UNDERTAKING



Grazie

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