

AMBITOS S3:LÍNEAS -RETOS-ÁREAS DE INVESTIGACIÓN E INNOVACIÓN

FIELD	LINES	CHALLENGES	AREAS OF RESEARCH AND INNOVATION
1. AGRI-FOOD	1.1 INNOVATION IN PRODUCTS AND PROCESSES IN THE AGRI-FOOD CHAIN.	BIOTECHNOLOGY IN THE SERVICE OF FOOD SAFETY AND NOVEL FOOD DEVELOPMENT	<ul style="list-style-type: none"> • Healthy, functional and personalised food (nutrition) • New packaging and preservation techniques. • Safe and traceable food. • Food from Paradise. Modernisation of artisanal production
		SUSTAINABILITY AND CIRCULAR ECONOMY IN THE AGRI-FOOD SECTOR.	<ul style="list-style-type: none"> • Adaptation of agricultural, livestock and forestry production to climate change. • Marine and freshwater health and resilience. • Natural resource and farm management • Forest stewardship/development of the forest-industry chain • Circular and sustainable bioeconomy
	1.2 STRENGTHENING OF RURAL ACTIVITY	PROMOTION OF TALENT AND ENTREPRENEURSHIP IN RURAL AREAS.	<ul style="list-style-type: none"> • Development of training channels for the professionalisation of rural activities. • New business models for the exploitation of rural products.
		DESARROLLO DE ESTRATEGIAS DIGITALES DE LA GRANJA A LA MESA.	<ul style="list-style-type: none"> • Digital media for rural business • Integrated agri-food chain logistics.
2. ACTIVE AND HEALTHY AGEING.	2.1 QUALITY OF CARE AT THE SERVICE OF CITIZENSHIP AND AGEING	HEALTH PROMOTION AGAINST DISEASES WITH HIGH PREVALENCE IN ASTURIAS AND FACILITATION OF INDEPENDENT LIVING	<ul style="list-style-type: none"> - Boosting the efficiency of the innovative health ecosystem - Development of neuroprotection strategies in active and healthy ageing. - New models of care/services aimed at comprehensive care for people throughout the ageing process. - Research, analysis and control of pandemics, continuing with the knowledge effort acquired with the COVID19 crisis.
		DIGITISATION OF HEALTHCARE AND PREDICTIVE, PROACTIVE AND PERSONALISED DIAGNOSTICS.	<ul style="list-style-type: none"> - Digital Transformation. Precision and personalised medicine - IT-assisted diagnostic systems - Data governance in the health sector
	2.2 REGIONAL SPECIALISATION IN BIOMEDICAL AND HEALTH RESEARCH	RESEARCH INTO NEW THERAPIES AND ADVANCED TREATMENTS.	<ul style="list-style-type: none"> - Advanced Therapies (tissue engineering, cell therapy, immunotherapy) - Cancer - New therapeutic targets - Biomarkers and biosensors - Neurodegenerative treatments
		CLINICAL RESEARCH SUPPORT: INFRASTRUCTURE AND PEOPLE.	<ul style="list-style-type: none"> - Enabling spaces and infrastructures for clinical research. - New technologies applied to biomedicine training.

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3. HERITAGE AND BIODIVERSITY	3.1 MANAGEMENT OF THE NATURAL AND CULTURAL ASSETS OF ASTURIAS	CONSERVATION OF THE NATURAL ECOSYSTEMS OF ASTURIAS	<ul style="list-style-type: none"> Biodiversity and Climate Change Ecosystem-based natural resource management Technological support for collaborative research
	3.1 MANAGEMENT OF THE NATURAL AND CULTURAL ASSETS OF ASTURIAS	INDUSTRIAL, HISTORICAL-ARTISTIC AND CULTURAL HERITAGE AS A DRIVING FORCE FOR ECONOMIC GROWTH.	<ul style="list-style-type: none"> Identification of elements of industrial, historical-artistic and cultural heritage. Scientific dissemination of elements of industrial, historical-artistic and cultural heritage.
	3.2 TOURISM INNOVATION WITH DESTINATION IDENTITY	DEVELOPMENT OF ASTURIAS AS A SUSTAINABLE AND INTELLIGENT TOURIST DESTINATION.	<ul style="list-style-type: none"> Sustainable tourism Smart tourism
		KEY DIGITISATION OF THE CREATIVE INDUSTRY.	<ul style="list-style-type: none"> Digital innovation in the orange economy Digital circuits and media for the dissemination of culture
4. ENERGY AND CIRCULARITY	4.1 ENERGY TRANSITION IN ASTURIAS	CLEAN ENERGY PRODUCTION AND GREEN HYDROGEN	<ul style="list-style-type: none"> Deployment of renewables and energy storage. Green H2 production. H2 value chain and related materials. Innovative models of energy production, distribution and consumption.
		SUSTAINABLE MOBILITY AND ENERGY EFFICIENCY IN CONSTRUCTION	<ul style="list-style-type: none"> Development of sustainable transport Decarbonisation of transport elements Building materials and systems Low-energy buildings
	4.2 CIRCULAR AND CARBON NEUTRAL INDUSTRY	DECARBONISATION OF INDUSTRIAL PROCESSES	<ul style="list-style-type: none"> Energy efficiency in industry Renewable sources and alternatives to the use of C in industrial processes Hydrogen as a vector for the decarbonisation of the productive sector CCUS. Carbon capture, use and storage
		USE OF WASTE FLOWS IN INDUSTRY. CIRCULARITY MODELS	<ul style="list-style-type: none"> Ecodesign of products and processes Sustainable materials and industrial symbiosis Urban industrial symbiosis
5. SMART AND RESILIENT INDUSTRY	5.1 COMPETITIVENESS OF THE INDUSTRIAL PRODUCT	INTERNATIONAL POSITIONING OF THE MANUFACTURE OF LARGE METAL-MECHANICAL COMPONENTS.	<ul style="list-style-type: none"> Public-private collaboration in the steel value chain R&D&I equipment Adoption of new technologies and data access and management. Advanced materials for large metal-mechanical structures and components.
		INCREASING THE ADDED VALUE OF INDUSTRIAL SUPPLY.	<ul style="list-style-type: none"> Increase the value perceived by the customer. Product servitisation. Nanomaterials and 2D materials. Response of materials to product demand in service.
	5.2 SMART MANUFACTURING	DRIVING THE FLEXIBLE, EFFICIENT AND CONNECTED FACTORY	<ul style="list-style-type: none"> Data collection/Industrial sensors Data processing/Artificial intelligence
		INDUSTRIALISATION OF ADDITIVE MANUFACTURING AND 3D PRINTING	<ul style="list-style-type: none"> Additive manufacturing technologies 3D product design Integration of additive manufacturing into industrial processes Materials for additive manufacturing Certification and approval