Wit Welcoming International Talent

This project has received funding from the *European Union's Horizon 2020 research and innovation programme* under Marie-Sklodowska Curie grant agreement No 101034285

ANNEX I: WIT AREAS, RESEARCH LINES AND RESEARCH SUBLINES/GROUPS OFFER
Call 2022

WIT AREA	RESEARCH LINE	RESEARCH SUBLINE/GROUP
1. AUTOMOTIVE MECHATRONICS AND ADVANCED MANUFACTURING	1.A RF / Microwave devices for satellite communications by 3D printing	1.A.1 Microwave Components Group (MCG) / UPNA, Miguel Ángel Gómez Laso 1.A.2 Antenna Group / UPNA, Jorge Teniente
	1.B Development and manufacturing of multi-source energy harvesting systems	1.B.1 Communication, signals and microwaves Group / UPNA, Antonio López Martín
	1.C Development and advanced manufacturing of sensors	1.C.1 Development of new concepts and manufacturing techniques for fiber optic sensors for road traffic control / Optical Communications Group / UPNA, Manuel López-Amo Sainz 1.C.2 Metamaterial nanophotonic architectures for LIDAR technologies / Antenna Group / UPNA, Iñigo Liberal 1.C.3 Improved metasurface radar sensors / Antenna Group / UPNA, Iñigo Ederra 1.C.4 Development and advanced manufacturing of sensors for continuous measurement of water quality in rivers and urban sanitation networks / Optical Communications Group / UPNA, Manuel López-Amo Sainz 1.C.5 Magnetic sensors for automotive and mechatronics applications / Physical properties and applications of materials Group / UPNA, Cristina Gómez Polo
	1.D Eco-efficient mobility management in sustainable urban transport	1.D.1 DECYL Group (Data, Statistics, Quality and Logistics) / UPNA, Javier Faulín Fajardo
	1.E Advanced fuel cell manufacturing	1.E.1 Environmental Technologies and Applications Group (TAMA) / UPNA, Antonio Gil-Bravo
	1.F Systems for high capacity communications in THz	1.F.1 Tunable reduction of wideband RCS by liquid crystals / Antenna Group / UPNA, Juan Carlos Iriarte 1.F.2 Dual circular polarization antennas / Antenna Group / UPNA, Jorge Teniente 1.F.3 Gap waveguide antennas / Antenna Group / UPNA, Miguel Beruete 1.F.4 Corrugated planar antennas / Antenna Group / UPNA, Miguel Beruete

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		1.F.5 Reconfigurable metasurfaces / Antenna Group / UPNA, Miguel Beruete 1.F.6 Design of array antennas based on CORPS beam forming networks / Antenna Group / UPNA, Carlos del Río 1.F.7 Analysis of beam forming networks type ODIN (Overlapped Distribution Network) / Antenna Group / UPNA, Carlos del Río 1.F.8 THz Fabry-Perot cavity dual polarization antennas / Antenna Group / UPNA,Iñigo Ederra
2. HEALTH	2.A Hematology: advanced therapies and diagnostic innovation	2.A.1 Myeloma and other gammopathies Group / UNAV, Bruno Paiva 2.A.2 CAR T Therapies for Neoplasms hematological and solid tumors / Molecular bases of hematological malignanices Group / UNAV, Felipe Prósper Cardoso
	2.B Pediatric Oncology	2.B.1 Advanced Biological Therapies for Pediatric Solid Tumors Group / UNAV, Marta Alonso Roldán
	2.C Nanomedicine	2.C.1 Nanomedicines and Drug Delivery Group / UNAV, María José Blanco Prieto
	2.D Preventive medicine	2.D.1 Prevention and treatment of hepatic steatosis in children with overweight or obesity / Nutrition and Physical activity for health, ELIKOS research Group / UPNA, Idoya Labayen Goñi 2.D.2 Cellular mechanisms and molecular factors involved in the relationship between excess adipose tissue and colon cancer / Obesity and Adipobiology Group / UNAV, Gemma Frühbeck 2.D.3 Health, diet and lifestyles in adults/ Epidemiology and Public Health Group / UNAV, Miguel Ángel Martínez González
	2.E Palliative care	2.E.1 ATLANTES, Global Palliative Care Observatory / UNAV, Carlos Centeno
	2.F Cardiology	2.F.1 Microbial pathogenesis Group / UPNA, Iñigo Lasa 2.F.2 Translational Cardiology Group / UPNA, Natalia López-Andrés 2.F.3 Myocardial remodelling and heart failure Group / UNAV-CIMA, Arantxa González Miqueo

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	2.G Gene Therapy and gene Regulation	2.G.1 Gene therapy for rare diseases / Laboratory of gene therapy for liver diseases / UNAV, Gloria Gonzalez Aseguinolaza. 2.G.2 Design and validation of a non-human primate model of Parkinson's disease based on a disseminated synucleinopathy / Functional neuroanatomy of the basal ganglia Group / UNAV-CIMA, José Luis Lanciego Pérez 2.G.3 Gene Regulation in Cancer / Long non-coding RNAs and cancer genome Group / UNAV-CIMA Maite Huarte.
	2.H Hepatology	2.H.1 Hepatic carcinogenesis Group / UNAV-CIMA, Matías A. Ávila Zaragoza
	2.I Immunology / Immunotherapy	2.I.1 Oncoimmunology Unit Group / UPNA-Navarrabiomed, David Escors Murugarren 2.I.2 Cancer signalling Unit Group / UPNA, Imanol Arozarena 2.I.3 Protein crystallography and structural immunology Group / UPNA-Navarrabiomed, Jacinto López Sagaseta 2.I.4 Cancer Immunotherapy Cytokine-based Therapies Laboratory Group / UNAV-CIMA, Pedro Berraondo
3. ENERGY	3.A Energy Grid Integration	3.A.1 INGEPER, Renewable Energy Grid Integration / UPNA, Luis Marroyo Palomo
	3.B Development of advanced materials and technologies for energy production	3.B.1 Physical properties and applications of materials Group / UPNA, Alberto López Ortega 3.B.2 Quantum materials for energy applications / Antenna Group / UPNA, Iñigo Liberal 3.B.3 Advanced wind turbine control / Dynamic Systems and Control Group / UPNA, Jorge Elso
	3.C Valorization of natural resources and wastes	3.C.1 Environmental Technologies and Applications (TAMA) / UPNA, Antonio Gil
4.ARTIFICIAL INTELLIGENCE	4.A Real-time data processing	4.A.1 Approximate reasoning and artificial intelligence Group (GIARA) / UPNA, Humberto Bustince, Jose Antonio Sanz Delgado
	4.B Spatial statistical problems	4.B.1 Spatial Statistics Group / UPNA, María Dolores Ugarte
	4.C Applications in Health, Advanced Manufacturing and Energy	4.C.1 Multifactorial analysis of Early Metabolic Syndrome using machine learning techniques / Approximate reasoning and artificial intelligence Group (GIARA) / UPNA, Humberto Bustince, Carlos López Molina, Idoya Labayen

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		4.C.2 Automatic control of life cycles for in vitro neuron cultures using computer vision / Approximate reasoning and artificial intelligence Group (GIARA) / UPNA, Humberto Bustince, Carlos López Molina, Montserrat Arrasate 4.C.3 Behaviour modelling and prediction in biological neuron networks / Approximate reasoning and artificial intelligence Group (GIARA) / UPNA, Humberto Bustince, Carlos López Molina, Andrea Serio 4.C.4 Machine learning-based prediction of adverse effects in colonoscopy biopsies / Approximate reasoning and artificial intelligence Group (GIARA) / UPNA, Humberto Bustince, Eduardo Albéniz Arbizu 4.C.5 Multifactorial study and profiling of oncological patients using Deep Learning and Big Data / Approximate reasoning and artificial intelligence Group (GIARA) / UPNA, Humberto Bustince, Ruth Vera 4.C.6 Deep learning in brain-computer interfaces / Algebra. Applications Group / UPNA, Luis M. Ezquerro Marín, Marisol Gómez Fernández