# UU

**Wit** Welcoming International Talent

# GUIDE FOR APPLICANTS

SECOND CALL FOR APPLICATIONS FOR EARLY STAGE RESEARCHERS

JANUARY 2023





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# **1 WIT: INTERNATIONAL DOCTORAL PROGRAMME**

# THE PROGRAMME

WIT Programme will offer 16 positions for ESRs of any nationality in 2 international calls (8 fellowships per call). The ESRs will develop an individual and freely selected research project at one of the two recruiting universities (UPNA and UNAV) from Navarre (northern Spain) during a 36-month period, in the fields of **Automotive-Mechatronics & Advanced Manufacturing, Health, Energy, with the Artificial Intelligence** applied as a cross-sectional area to each of the previous research lines.

The programme will recruit the ESRs through an open, informed, efficient and transparent selection process based on the principles established in <u>European Charter</u> for <u>Researchers</u> and the <u>European Code of Conduct for the Recruitment of Researchers</u>.

The 16 contracts will be distributed in two different calls.

The second call for applicants will offer 8 contracts.

WIT Programme is cofunded by the EU as part of the H2020 Marie Sklodowska-Curie Action Cofund.

# HOSTING UNIVERSITIES

# **UPNA: PUBLIC UNIVERSITY OF NAVARRE**

# https://www.unavarra.es/home

The Public University of Navarre (UPNA) is a teaching and research institution characterized by its active participation in international and national Research programmes. At EU level, UPNA has a vast experience in participating and coordinating several cross-border and cross-national projects (Interreg A, B and C), Framework Programmes (from FP5 to Horizon Europe) and many other programmes. Currently, UPNA is participating in MSCA-ITN projects (TESLA, MENELAOS), COFUND doctoral programmes (Iberus TALENT), and fellowship programme (Iberus EXPERIENCE) and





several national and regional funded projects for the training of pre-doctoral and postdoctoral researchers. UPNA is also currently participating in or co-ordinating in 13 H2020 and Horizon Europe projects (including 2 ERC Starting Grants), 9 EU funded research projects in different calls (Interreg VA and VB, Rights Equality and Citizenship Programme, Employment programme etc..) and in more than 150 nationally and regionally funded research and innovation projects.

The UPNA has six research institutes: the Institute of Advanced Materials (INAMAT), the SmartCities Institute (ISC), the Institute for Advanced Research in Business and Economics (Inarbe), the Institute for Research in Innovation and Sustainability in the Food Chain (IS-FOOD), the Institute for Advanced Social Research (I-Communitas) and the Institute of Multidisciplinary Research in Applied Biology (IMAB). These are joined by the Jerónimo de Ayanz Centre, in which researchers and technical staff both from enterprises and the University work jointly on R&D+innovation technology transfer projects. In this way, UPNA is a major contributor to the development of Navarra Region; in fact, it has been pointed out as the Spanish public university with the best employability of its graduates and the one that contributes the most to the regional development.

With around 9,000 undergraduate students and one Master and Doctoral School with over 1,000 graduate students; it takes part in several international networks (in Europe: Erasmus program; in Latin America: Viceroy Palafox program; in North America: ISEP program; and other bi-lateral agreements with universities in the rest of the world), receiving annually more than 500 foreign students. UPNA was designated by the Spanish Government as an International Campus of Excellence; which is organized into 4 faculties and 2 technical schools, with a total of 11 departments.

# **UNAV: UNIVERSITY OF NAVARRA**

# https://en.unav.edu/

The University of Navarra is a private non-profit Spanish institution with more than 14.000 students in five different campuses: Pamplona, San Sebastian, Madrid, Barcelona and New York with a wide network of international universities and research centres.

UNAV has a clear commitment in attracting new talent and incorporating high-level researchers within its different centres. It also counts with a specialised unit at supporting researchers. The International Project Management Unit at the University of





Navarra supports the research community in obtaining international research funds. Integrated by a group of six international experts, IPM offers its researchers a sound experience in locating appropriate funding calls and project management. To date, the University of Navarra counts with over 40 H2020 projects alone, coordinating over 10 projects. The university also counts with 6 ERC grants and over 22 MSCA grants.

UNAV counts with a specialised Research Management Unit offering support to its research community in tailored project management and public/private funding search. Additionally, UNAV also counts with a specialised unit at the Technology Transfer Office supporting researchers on IP and the transfer and exploitation of results. Specialists of this unit are recognised as official Advisors of the European Commission's IP Helpdesk. On the other hand, the Science Dissemination Unit develops a unique role in bringing together UNAV's research activity closer to society through informative and training activities, newsletters and its Science Museum.

UNAV has a clear commitment in attracting new talent and incorporating high-level researchers within its different centers. It offers a suitable working environment in terms of health and safety conditions, facilities and infrastructures, and compliance with current regulations for working conditions in salaries, flexible hours, part time work, sabbatical, etc. Concerning the professional development of researchers, UNAV counts with an embedded Professional Development Program through which an Evaluation Commission evaluates researchers. This program is published on UNAV's website. UNAV offers researchers, through the Bibliometric Unit, a list of services that include advice and training during their professional career. Likewise, the Research Management Service offers in house, tailored made training courses, on public/private funding opportunities and collaboration opportunities through its Monthly Newsletter. The HR Department offers through the employee's intranet a wide variety of professional courses accessible to all research and academic community. UNAV's Doctoral School also offers a wide catalogue of training activities published annually on its website.





# DOCTORAL PROGRAMMES

Both universities offer several doctoral programmes for WIT Programme's research areas.

The doctoral program selected must be from the same university as the research group to which you want to belong. When you complete the on line application form, you have to take into account the following:

- If you want to do the thesis in a research group that belongs to the **UPNA** you must choose a doctoral program of the **UPNA**
- or if you want to apply for a research group of the UNAV you must indicate a doctoral program of the UNAV

# Very important!!



Each research group of WIT Programme has indicated the doctoral programme need it in order to work on that research subline. You can find this information in every research group's information sheet.





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

UNIVERSITY: Public University of Navarre (UPNA) / Institute of Smart Cities (ISC)

#### WIT PROGRAMME'S RESEARCH LINE NAME:

RF/Microwave devices for satellite communications by 3D printing

DOCTORAL PROGRAMME: <u>https://www.unavarra.es/escuela-</u> doctorado/doctorate-programs/current-plan/engineering-andarchitecture/doctorate-in-communications-technology-bioengineering-andrenewable-energies?languageld=1

#### COMPLETE DESCRIPTION OF THE RESEARCH LINE:

Additive Manufacturing (AM) or, in general, 3D printing, is as an enabling technology for RF/microwave satellite devices and Internet of Space (IoS). In the context of RF/microwave, some of the most promising AM techniques are fused deposition modeling (EDM) of polymers polymer and ceramic stereo-





#### Doctoral programmes in the Public University of Navarra (UPNA)

#### Science

- Doctorate in Science and Industrial Technologies
- Doctorate in Mathematics and Statistics
- Doctorate in Synthetic and Industrial Chemistry

# Engineering and Architecture

- Doctorate in Communications Technology, Bioengineering and Renewable Energies
- Doctorate in Biotechnology

# Health Sciences

• Doctorate in Health Sciences

# Doctoral programmes in the University of Navarra (UNAV)

# Health

- Doctoral program of Applied Medicine and Biomedicine
- Doctoral program on Medicines and Health
- Doctoral program in Natural and Applied Sciences

# TRAINING & TRANSFERABLE SKILLS

A variety of courses will be put in place so that researchers benefit from the opportunities derived from the participation at the WIT programme. Each University has their own training programme, offering annually a wide range of courses. Personnel of the Universities, academics, entrepreneurs, and subcontracted experts will provide these courses.

Fellows will be offered a complementary agenda to further develop their competences in research as management of research projects, being observer of third-party research; getting involved in postgraduate courses offered by centres within the WIT framework by giving lectures and/or developing course contents; organising and/or participating in workshops, symposia, conferences, etc.

Additionally, the recruiting Universities counts on a relevant Programmes of Continuous Training that will also be a part of formative offer to fellowships as contracted staff of the University. This





Programme includes specialisation studies or other studies leading to a diploma or certificate in order to improve the capacities of researchers, professionals and students in the Campus.

# Training in non-research oriented transferable skills

Recruiting universities and hosting research centres will offer a wide set of diverse training sessions, courses, lectures and workshops additional to scientific trainings, focused particularly on transferable skills all along the academic year to enable gaining new skills to their students and researchers.

- > New trends in Tech Transfer Actions. From lab to society.
- Gender analysis in research.
- > Tutored program for career guidance and development for early-stage researchers.
- Introduction to Ethics in Research.
- > First steps in submitting papers and asking for projects.

#### PARTNERS ENTITIES

WIT will involve academics and researchers from near 30 other internationally supported academic, as well as industrial partner organisations focused on the Programme areas. This will ensure an attractive, cross-sectoral and international ecosystem for incoming researchers by offering **secondments**, **short stays**, **and training at industry**.

NAME OF	COLLABORATING	Coun	Sector/expertise
UNIVERSITY/RESEARCH	AND	try	
TECHNOLOGICAL CENTRE			
1. AIN- NAVARRE INDUST	RY ASSOCIATION-	ES	Intelligent Systems, sensor&
CLUSTER			communications
2. LUREDERRA CENTRO TEC	NOLÓGICO	ES	Nanotechnology, materials,
			advanced environment
3. IDISNA- INSTITUTO DE INVESTIGACIÓN			Health
SANITARIA DE NAVARRA			
4. NAVARRA BIOMED- FUNDACIÓN MIGUEL			Health
SERVET			
5. CENER - NATIONA	L CENTRE FOR	ES	Energy
RENEWABLE ENERGY			
6. KATHOLIEKE UNIVERSITEIT LEUVEN		BE	Health, cardiovascular
			sciences





7. DZNE – DEUTSCHES CENTRUM FÜR	DE	Neuroscience and nervous	
NEURODEGENERATIVE ERKRANKUNGEN		system	
8. WEIZMANN INSTITUTE OF SCIENCE	IL	Health, biomedical	
9. YERKES NATIONAL PRIMATE RESEARCH	US	Neuroscience	
CENTER- EMORY UNIVERSITY			
10. FRIEDRICH ALEXANDER UNIVERSITY-	DE	Immunology	
11. THE FLOREY INSTITUTE-UNIVERSITY	AU	Mental health	
MELBOURNE			
12. KING`S COLLEGE LONDON	UK	Health, Immunology / Bio- Engineering	
13. THE INSTITUTE NATIONAL DE SANTE ET DE	FR	Health, cardiovascular	
RECHERCHE MEDICALE -UNIVERSITE DE		sciences	
ROUEN			
14. NEWCASTLE FIBROSIS RESEARCH GROUP-	UK	Health, cellular medicine	
UNIVERSITY NEWCASTLE			
15. NATIONAL CANCER INSTITUTE-NIH	US	Health, Immunology	
16. SCHOOL OF CARDIOVASCULAR DISEASE	NL	Health, cardiovascular	
MAASTRICH UNIVERSITY		sciences	
17. UNIVERSITÁ DEGLI STUDI DI CATANIA	IT	Engineering	
18. WROCLAW UNIVERSITY OF SCIENCE AND	PL	Electronics and computers	
TECHNOLOGY			
19. VIRGINIA COMMONWEALTH UNIVERSITY	US	Computers	
20. FRAUNHOFER INSTITUTE - FHR	DE	Electromagnetics sensors	
21. RESEARCH CENTER TGRAF ISEC LISBOA	РТ	Graphic Technology	
22. SLOVAK UNIVERSITY OF TECHNOLOGY IN	SK	Engineering	
BRATISLAVA			
23. ISTITUTO NAZIONALE DI RICERCA	IT	Materials science,	
METROLOGICA		nanoscience	
24. NAITEC-CENTRO TECNOLÓGICO DE	ES	Automotive and	
AUTOMOCIÓN Y MECATRÓNICA		mechatronics	
NAME OF COLLABORATING	Coun	Sector/expertise	
INDUSTRIAL/ENTERPRISES	try		
25. ANTERAL, S.L.	ES	High Performance antennas,	
		radar technology	
26. MAKING GENETICS	ES	Genetic and epigenetic	
		biomarkers	





27. MG NUTRICIÓN 3G. S.L.	ES	Genetic	and
		commercialization	
28. CINFA	ES	Pharmaceutical	
29. ALAN HODGSON CONSULTING LTD	UK	Security printing	

# SECONDMENTS IN NON-ACADEMIC INSTITUTIONS

The researchers will have the opportunity to perform **secondments** that will increase the impact of their research projects. WIT integrates the possibility of strengthening the training and competence of the fellows through non-academic partners that will facilitate better technology transfer and have specific infrastructures and capacities and future market applicability. The fellow will be able to choose one of these organisations in the project, having to justify the need and advantages that such a secondment has for his/her project. These non-academic organisations will coordinate with the universities of Navarre, their line of research and the main mentor of the university in order to offer the fellow all possible potential for his/her research. The non-academic organisation can make its entire research and knowledge infrastructure available to the fellow by appointing a tutor for the duration of the secondment.

# INTERNATIONAL MOBILITY & NETWORKING

All fellows will be encouraged to make **short lab visits** and to participate in training courses in European and international universities collaborating in the framework of the Programme. UPNA and UNAV will favour the **international mobility** to obtain International Mention in the doctoral degree and, together with the list of research areas, will make their international research networks available to candidates.

# RESEARCH AREAS

# AUTOMOTIVE, MECHATRONICS AND ADVANCED MANUFACTURE

•RF/Microwave devices for satellite communications by 3D printing

• Development and manufacturing of multi-source energy harvesting systems





• Development and advanced manufacturing of sensors

• Eco-efficient Mobility Management in Sustainable Urban Transport

• Advanced fuel cell manufacturing

• Systems for High capacity communications in THz

HEALTH

•Hematology: advanced therapies and diagnostic innovation

Pediatric oncology

Nanomedicine

• Preventive medicine

• Ophthalmoloy

• Cardiology

• Gene therapy and Gene regulation

• Hepatology

• Immunology / Immunotherapy

ENERGY

• Energy grid integration

• Development of advanced materials and technologies for energy production

• Valorization of natural resources and waste

ARTIFICIAL INTELLIGENCE APPLIED TO EACH OF THE PREVIOUS RESEARCH LINES

Real-time data processing

•Spatial Statistical Problems

• Applications in health, advanced manufacturing and Energy

The **research groups** adscribe to these areas are on the website (<u>here</u>) and in the Annex I of this guide.

# **2 WIT INTERNATIONAL FELLOWSHIPS**

CONTRACTS OFFERED IN THE SECOND CALL

WIT programme will offer **eight contracts** for ESRs of any nationality.

The candidates will be offered a **36-month full time pre-doctoral researcher contract**.





Their main obligation will be to develop a doctoral thesis at one of the two Universities the Public University of Navarre and the University of Navarre, within one of its official doctoral programmes.

Wit will recruit the ESRs through an open, informed, efficient and transparent selection process established based on the principles established in the <u>European Charter for</u> <u>Researchers</u> and the <u>European Code of Conduct for the Recruitment of Researchers</u>.

# Main package for ESRs:

- **Full time contract** (up to 36 months) in the University where the doctoral programme will be done, University Public of Navarre or University of Navarra.
- Gross salary (living allowance) of 32.400€ per annum. The salary will be paid by the employer (recruiting universities UPNA, UNAV) and will include (Spanish law) all corresponding benefits such as national social security & health insurance, pension deductions, employee tax and maternity/paternity leave, etc.). The endowment for the recruitment of each ESR will be €36,000 (with family allowance) or €32,400 (without family allowance) per year, corresponding to a gross annual salary of €27,944 or €25,144 respectively (after payment of the employer's social security contribution by the contracting universities).

Please notice that this is gross contribution. The net salary will result from deducting all compulsory (employer/employee) Social Security contributions as well as direct taxes (e.g., income tax) from the gross amount. Additionally, the remunerations may vary annually depending on the Social Security rates. The rate indicated is for researchers working full-time

- Relocation expenses (mobility allowance) up to 2.400 €. Each ESR will receive a single payment at the beginning of the fellowship to cover relocation costs according to the average distance between the hosting institution and the ESR's location.
- Family allowance: Wit Programme will be particularly aimed at ensuring the compatibility of the professional and family development. Researchers with children and/or elderly dependent requirements will be offered a flexible organisation of work by individually tailored solutions, such as teleworking or flexible working hours. Furthermore, these fellows will be provided an additional benefit to their salary consisting of up to 3,600€ of family allowance per annum. In addition, maternity and paternity leaves will be paid in accordance with the Spanish national law, and additionally, in case of maternity or paternity leaves





during the fellowship, a corresponding extension of the duration of the fellowship will be granted to enable them finishing their research.

- **Personal research budget** up to 4.800 € per annum for each ESR to cover comestible, conference attendance, publication costs, workshops, etc.
- **Travel allowance** up to 2.400 € per annum for each ESR to cover travel and subsistence during secondments or short stays at partner facilities.
- Concerning the researchers with special needs such as physical disability/impairment, they will be supported by the recruiting universities and provided with personalised support by specialised professionals (e.g., personal assistants, sign language interpreters), as well as technical support such as bespoke equipment, adapted computers, specific software, virtual space for support and exchange of materials.

# CAREER BREAK

Wit Programme welcomes researchers that have taken a career break and wish to return to a career in research. Indeed, a career break might be considered an advantage if the applicant's CV reflects relevant achievements acquired during that period, e.g. experience in industry. Career breaks due to maternity/paternity leave or national service will not have a negative impact on the assessment of any applicant as the thresholds and scores defined in the evaluation process will compensate for this.

# EQUAL OPORTUNITIES

An equality plan will be implemented during the doctoral programme to ensure a balanced participation of women and men at all stages of the programme.

These are some of its actions:

- Encourage that a minimum of 40% of the applications received should come from female applicants. This will be ensured by female-oriented dissemination activities and promotion of attractive conditions for researchers with families.
- > The percentage of women researchers selected in each phase will be a minimum of 20%.
- Wit will offer equal attractive working conditions, including financial and social benefits to all researchers regardless of their gender. They will be particularly aimed at ensuring the compatibility of the professional and family development.





- Researchers with children and/or elderly dependent requirements will be offered a flexible organisation of work by individually tailored solutions, such as teleworking or flexible working hours.
- Career break: researchers who have interrupted their career for family or medical reasons will be encouraged to participate in the Wit programme and to restart their scientific career.
- > Training on inclusion of gender perspective in research.
- On-demand female-tailored mentoring and training activities will be organised to support female fellows in career planning and development.
- > An appropriate gender balance will be respected in the board's composition.
- Inclusive language in all the material of the Programme: The website and the guidelines prepared have been done considering the gender equality principles
- Women visibility (web, flyers, and social media): we will ensure that there is a balanced representation of men and women in images.
- Particular attention will be paid by choosing, whenever possible, women scientists as speakers in training lectures and seminars, in order to provide positive role models for young female scientists.

# INCLUSION OF RESEARCHERS AT RISK

We will encourage Early Stage Researchers at risk to apply, researchers who are experiencing threats to their life, liberty or research career, and those who are forced to flee or have been displaced because of such threats.

Wit, as a MSCA COFUND Programme will inform Scholars at Risk Europe (SAR) about the two international calls for the recruitment of the researchers. SAR will ensure wide dissemination of open calls to researchers at risk, working through its partner organisations, networks, mailing lists and social media channels.

From the management of the programme we will try to offer a tailored advice and guidance, taking into consideration their specific situation and being especially sensitive to security concerns.





# **3. APPLICATION PROCESS**

# PREPARING THE APPLICATION

Important aspects to have into consideration before starting:

- Applicants are encouraged to start preparation as early as possible. Please review all relevant documentation, including this Guide, FAQs and Application Templates published on the WIT website (Applications section)
- Applicants will have to provide the complete application and all the documents in English within the call deadline.
- Incomplete or late applications will not be considered.
- Page limits cannot be exceeded.
- The second call will be open for two months (18 January-18 March); no applications will be accepted before or after the deadline.
- Each applicant can only submit one application; failing to do so will result in all the applications being rejected.

# TIME LINE OF THE SECOND CALL

- Publication of the call: 18 January 2023
- Opening of the Application Process: 18 January 2023
- Deadline for applications: 18 March 2023
- Eligibility checking: 18 March-18 April 2023
- Preselection of candidates: 18 April -18-May 2023
- Preparation and submission of research proposal: 01 -30 June 2023
- Evaluation phase 2: July-August 2023
- Interview: September 2023
- Final Results: September 2023
- Contracts signings: October2023





Opening of the applicacion process 18 January Deadline for applications 18 March

Selection Process April-September 2023

Contracts signings October 2023

# WIT WEBSITE

The central portal for Wit programme information will be its website. The site also includes the Applicants' Portal. The website provides all the information and documents necessary to apply for the positions and will serve as first entry point for all information about the programme throughout its duration.

# PUBLICATION OF THE CALL

Once the call is launched, candidates will have **2 months** to submit their application and the requested documentation for the phase **1** (on line application form must be completed and submitted and load the requested documentation). The entire application process will be online and no paperwork will be allowed.

In order to ensure a fully informed and transparent selection process, candidates will be individually informed via email about the results in each phase of the selection process.

# HOW TO APPLY

Applications must be submitted via **online** through WIT official website <u>wit.navarra.es/en/</u>

The online application will be open through the duration of the call (2 months; from 18 January to 18 March).





You will have to send the application form with your personal data through the website taking into account:

- ✓ You must fill in at least the mandatory data (marked with a red star).
- $\checkmark$  You must use the available templates for the CV and the expression of interest.
- ✓ Attached documents must be submitted as a single PDF file in each field and must be named with the acronym and the surname of the applicant (see the example).
- ✓ Mandatory documents are highlighted with a red star.

Name	
John	
Surname	
Smith	
Birth date:	
03/25/1991	
Gender	
🔾 Male i 🔘 Female 🧕 Others	
Nationality	
Ireland	\$
Passport number	Formulario Cofund (Widget Page) 🐱
Argentina	<u>.</u>
Algentina	<b>`</b>
City	
Buenos Aires	
Contact email	
john@gmail.com	
Country Code telephone: for example, in t	he case of Spain, 0034
0033	
elephone number	
•	





\*Do you have family obligations? (Spouse and/or children)

Family is defined as persons linked to the Fellow by (i) marriage, or (ii) a relationship with equivalent status to a marriage recognised by the legislation of the country where this relationship was formalised; or (iii) dependent children who are actually being maintained by the Fellow

💿 Yes 🔿 No

\*Are you a person with any kind of disability?:

O Yes O No

Mobility self-check.

\*Have you lived, worked or studied in Spain in the last 3 years?:

⊙ Yes ○ No

If the answer is yes, for how many months?

I lived in Spain for 4 months

Early-stage researcher self-check.

\*Did you complete the studies that allow the access to the doctorate after 18 March 2019?:

🔾 Yes 🛛 O No

If the answer is no: You are a researcher coming from a career break. Please provide details of any period of inactivity in research: (include dates and nature of activities undertaken in each period and attach the document that prove it):

I have been working for a company for one year

\*Are you a refugee?

🔾 Yes 🛛 O No





# Education

#### \* Bachelor's Degree

Sociology

#### \* University

Trininty College

#### \* Start date

03/24/2013

#### \* Graduation date

03/24/2017

#### \* Master's Degree

International Law

#### \* University

Cork University

#### \* Start date

03/24/2019

#### \* Graduation date

03/24/2020

#### ENGLISH LANGUAGE PROFICIENCY: \*

- UNIVERSITY OF CAMBRIDGE
- TOEFL
- □ IELTS
- DUOLINGO ENGLISH TEST
- OFFICIAL LANGUAGE SCHOOLS (EOI) IN SPAIN
- PERSON EXEMPTED ON THE BASIS OF COUNTRY OF ORIGIN OR STUDIES COMPLETED





# **DOCTORAL PROGRAMME**

#### \* WIT areas

SELECT ONE WIT AREA

2-HEALTH

#### \* Research line/research group

SELECT ONE GROUP

2.F.1 CARDIOLOGY / Microbial Pathogenesis Group / UPNA, Iñigo Lasa

#### \* University

SELECT ONE UNIVERSITY

1-UPNA: Public University of Navarra 🗢

If you want to do the thesis in a research group that belongs to the **UPNA**, you must choose a doctoral program of the **UPNA** 

If you want to apply for a research group of the **UNAV**, you must indicate a doctoral program of the **UNAV** 

You can find this information in every research group information sheet

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#### \* Doctoral Programme

SELECT A DOCTORAL PROGRAMME (THE DOCTORAL PROGRAM SELECTED MOST BE ONE OF THE INDICATED IN THE SHEET OF THE RESEARCH GROUP TO WHICH YOU WANT TO BELONG)

Doctorate in Health Sciences

# \* Details of two references letters (current position, institution, email o telephone number):

Angela Hudson, University of Galway (Ireland). ah@gmail.com Tom Harris, Cork National University (Ireland). th@gmail.co m





# Mandatory documents are highlighted with a red star. Documents must be submitted as a **single PDF file** in each field.

\* Attach document with scanned copy of official university diploma and academic records (bachelor's degree (TIT 1.)

TIT 1 SMITH.pdf Examinar... TIT 1 SMITH.pdf

#### \* Attach scanned copy of official university diploma (master's degree) (TIT. 2)

TIT 2 SMITH.pdf Examinar... TIT 2 SMITH.pdf

#### \* Attach Scanned copy of all passport pages or mobility rule compliance document (MR)

MR SMITH.pdf Examinar... MR SMITH.pdf

#### \* Attach English certificate or exemption document (EL)

EL SMITH.pdf Examinar... EL SMITH.pdf

# \* Attach Curriculum Vitae (CV)

CV SMITH.pdf Examinar... CV SMITH.pdf

#### \* Attach expression of interest document (EOI)

EOI SMITH.pdf Examinar... EOI SMITH.pdf

#### Attach letter of recomendation1 (RL1)

RL1 SMITH.pdf Examinar... RL1 SMITH.pdf

#### Attach letter of recomendation2 (RL2)

RL2 SMITH.pdf Examinar... RL2 SMITH.pdf

# Attach supporting document of the merits indicated in the CV (MJ)

MJ SMITH.pdf Examinar... MJ SMITH.pdf

#### Attach supporting document of particular circumstances (OPD) OPD SMITH.pdf Examinar... OPD SMITH.pdf

Please name the attached documents with the <u>Acronym and</u> <u>your surname</u> like in the example.

**EIO+SMITH** 





The applicant:

☑ Declares being up to date with taxes and social security obligations with Navarre's Government

Authorises the Department of University, Innovation and Digital Transformation to carry out notifications and any other communications only by telematics means.

The applicant must provide an email address for notifications

\*

Knows and accepts the rules of this call and declares that the above information is true

Send

When you submit your application, you will receive this message

# APPLICATION FORM

Your application has been submitted successfully. Thank you very much

# DOCUMENTATION

The application shall be formalised by submitting, in separate files, the following documents through the Programme's website. All documents must be completed or written in English in pdf format and clearly identified with the applicant's acronym and surname:

# A. Application form (online)

It shall contain personal identification information, specific information to ensure compliance with the requirements, as well as other information relating to the doctoral programme to be studied, WIT area, line and group of research chosen, etc.





# B. Documents accrediting compliance with the requirements:

- **Documents confirming the fulfilment of ESR status:** Applicants will not need to provide additional information if they have stated in their application form that the date of completion of the studies that allow access to the doctorate is within the last 4 years from the date of submission of applications. Should this not be the case, documentation must be provided regarding interruptions in the research career (e.g. career break) that confirms that the applicant is in the first 4 years of their research career.

- **Supporting documents for compliance with the mobility rule (MR):** Applicants must submit a single document containing all pages of their passport, municipal records, employment contracts, university fees, etc., supporting the applicant's compliance with the mobility rule.

- **Copy of Diplomas (TiT 1 and TIT2)** that allow access to the doctorate and their academic records. Should applicants have carried out their studies in countries belonging to the EHEA, the "European degree supplement" must be provided. In the case of studies carried out outside the EHEA, applicants must provide the documentation from the university or similar institution accrediting that the qualification provided allows access to doctoral studies in the country where the studies were carried out. This information must be provided in a single document and in addition to the degree and academic record.

- **Document providing proof of the applicant's level of English (EL):** Only one of the certificates indicated in Article 5 will be accepted. Applicants who have completed their Bachelor's or Master's degree studies in an English-speaking country or whose mother tongue is English must, alternatively, present the documentation accrediting this circumstance (passport, degree, etc.).

# C. Supporting documents necessary for the correct scoring of applications:

- **Curriculum Vitae (CV):** Personal, academic and professional information as well as scientific production. Applicants must use the template, which is available on the website.

- **Recommendation Letters** (RL1 and RL2): (Up to two letters).

- **Expression of interest (EOI**): (Up to two A4-sized documents). Applicants must submit a research proposal and express their interest in developing it within the WIT Programme. A template for this document can be found on the website.





# **D. Other Documents:**

- **Document providing proof of personal circumstances (OPD):** Applicants who have indicated family obligations, career breaks, refugee status, etc. within their application form must provide, in a single document, all the information (birth certificates of children, marriage certificate or equivalent legal document, disability certificate, asylum application, etc.), and certifying said circumstance.

- **Document providing proof of achievements indicated in the CV (MJ):** Supporting documents that could not be accredited via DOI or via URL must be included in a single document.

# ELIGIBILITY CRITERIA

Applicants, regardless of their nationality and age, must meet the following eligibility criteria at the call deadline:

 Research experience-Early-Stage Researcher (ESR): applicants must be in the first four years (Full-Time Equivalent Research Experience: it is measured from the date when a researcher obtained the degree which would formally entitle him or her to embark on a doctorate) of their research careers at the time of submission of their application and not yet have been awarded a doctoral degree.

**Career breaks**: exception will be made for career break due to maternity/paternity leave, illness or compulsory national services. These career breakers will be encouraged to apply for the WIT Programme and to restart their scientific careers. Besides, the research career path and any breaks caused by interruptions due to time spent working in the industry or other sectors will be considered an advantage of the intersectoral ability of the researcher.

2) Comply with the MSCA mobility rule: Applicants must not have resided or carried out their main activity in Spain for more than 12 months, (whether consecutive or not) within the 3 years immediately prior to the call deadline. Spanish researchers who fulfil this requirement can also apply.

**Returnees from phases of international, intersectoral and/or non-academic mobility** (such as research stays outside of Spain, working for industry, or after a career break e.g. due to family reasons or medical reasons) are especially encouraged to apply.





- 3) Hold a degree entitling them to embark on a doctorate: applicants must have completed the studies that lead to an official university degree from any country of the European Higher Education Area (EHEA) awarding 300 ECTS, of which, at least 60 ECTS must correspond to master level. Alternatively, they must have completed a degree in a University not adapted to the EHEA that gives access to doctoral studies.
- 4) Language: Applicants must show evidence of at least a B2 English language ability level by submitting one of the following certificates:
- > TOEFL: minimum score of 83 for the Internet-based test.
- University of Cambridge: minimum score of 176 in the First Certificate in English (grade A or B), Certificate in Advanced English, Certificate of Proficiency in English or the Linguaskill online test.
- > IELTS: minimum score of 6.5 in the Academic or General Training version.
- > Duolingo English Test: minimum score of 105.
- Official Language Schools (EOI) in Spain: Certificate of B2 level or higher.\*

No other certificates will be accepted, regardless of whether they are from the same or other organisations that may be considered as equivalent to the above-mentioned. Applicants will not need to submit an English language certificate if they are a national of any of the following countries: Antigua and Barbuda, Bahamas, Barbados, Belize, Canada, Dominica, United States, Grenada, Guyana, Ireland, Jamaica, Malta, New Zealand, United Kingdom, Saint Vincent and the Grenadines, Saint Kitts and Nevis, Saint Lucia, South Africa, Trinidad and Tobago

Likewise, those who have completed undergraduate (minimum 3 years) or postgraduate (minimum 2 years) studies in English, in a country other than their country of origin, and can prove it, do not need to present the language certificates mentioned above.

\*Applicants who provide academic transcripts from Canada attesting that studies were conducted in English do not need to provide a certificate of English proficiency.





# Revision of the eligibility criteria that apply to the call will be done after deadline.

After administrative processing, the provisional list of applications that have been admitted, excluded and in need of rectification (indicating the reasons for rejection or rectification) will published on the website. Applications that fail to provide proof of achievements indicated in the CV cannot be rectified.

Applicants will have a period of seven calendar days to submit their amended applications on the website. After that period of time, the definitive list of admitted and excluded applications will be published on the website.

Both provisional and definitive lists of admitted and unsuccessful applications will be notified by e-mail.

# **4 SELECTION PROCESS**

Once the definitive shortlist of successful applicants has been published, the applications that have met the requirements, and are therefore eligible, will be classified according to the four WIT thematic areas to which they are assigned according to Annex I of this call for proposals.

The selection process will consist of the following phases:

- First Phase: pre-selection
- Second Phase: final selection
- Third Phase: personal interview

# 1<sup>ST</sup> PHASE: PRE-SELECTION PHASE

In this phase, a maximum of 10 applications will be pre-selected for each of the four WIT areas listed in Annex I. An Evaluation Panel of 12 experts, who will organise their work according to the four WIT areas, producing a report for each application, will carry out the evaluation of the applications in this phase. Three experts, one of whom shall have an industrial (non-academic) profile, will evaluate each application. The score obtained in this phase will only be used to move on to the next phase and **will be independent to the score obtained in the second phase.** 





# Scoring Criteria

Each application shall be awarded a maximum of 100 points according to the following criteria:

**1. CV: Up to 50 points.** Preference will be given to the applicant's studies and academic records, assessing their suitability for the chosen sub-line, whether those studies have been completed within the framework of international mobility actions, previous awards and grants, etc.

**2.** Letters of recommendation: Up to 25 points. The recommendation and relevance of those who endorse them will be assessed.

**3. Motivation and relevance of the expression of interest**: Up to 25 points. This criterion will assess the novelty and interest of the proposal and its feasibility within the WIT Programme's framework, as well as the candidate's motivation and complementarity to work as an ESR in the chosen research group, and the fellowship's potential contribution to the applicant's research career.

# Provisional and final shortlist

Once each application has been assigned a score, they will be ranked in order, in each of the WIT areas. The ten applications with the highest scores in each of the areas, which have exceeded the threshold of 60 points, will be shortlisted to move on to the second phase.

Both, the provisional list of pre-selected and unsuccessful applications, will be published on the WIT website, allowing a period of **five days** to file any objections. Applicants will be notified by e-mail of the publication of the lists and unsuccessful applicants will receive the Evaluation Summary Report.

Applicants may contest the procedural aspects of the evaluation, such as material or factual errors. The Evaluation Committee's scientific or technical judgement shall not be contested.

Once any objections have been addressed, the definitive list of pre-selected applications will be published on the website and candidates will be notified by e-mail.





# 2<sup>ND</sup> PHASE: FINAL SELECTION PHASE

After the definitive list of pre-selected applications has been published, applicants accessing the final selection phase will be required to prepare and submit the following documents. These must be submitted electronically through the WIT website and within **a non-extendable period of 30 days.** 

**1. Research Proposal:** Candidates must respect the 5-page limit and use the template available on the WIT's website.

**2. Ethics self-assessment:** A template is available on the WIT's website.

# Scoring Criteria

# The score obtained in this phase will be independent of the score obtained in the first phase and will not be added to it.

To draw up the pre-selection shortlist, the Evaluation Panel and a group of international experts from an external evaluation entity will support the Evaluation Committee. The Evaluation Committee will organise its work according to the scientific areas listed in Annex I and will prepare a report for each application, assigning it up to 100 points according to the criteria set out below. Two members of the Evaluation Panel and two international experts will evaluate each application.

1. **Researcher's excellence: Up to 50 points.** The provided CV and letters of recommendation will be assessed, considering the following criteria:

- Academic achievements: Studies completed and their academic records; assessing their suitability for the chosen sub-line, and whether they were completed in an international mobility framework; previous awards and grants, etc.

- Research experience: Participation in projects, publications, teaching experience, participation in conferences.





- Complementary competences: teamwork, work activity in industry, research management, dissemination and transfer actions, etc.

- Other: Recommendation letters.

2. Research proposal: Up to 30 points: The following aspects will be considered:

-Quality: Originality and innovative nature of the project, scientific-technical quality including inter/multidisciplinary, state-of-the-art and proposed methodology.

-Proposal's viability: coherence between the approach and proposed methodology, proposed approach and capacity to carry it out.

- The potential impact and relevance of the research.

- Consistency of the proposal with WIT's lines of research.

- Complementarity between the candidate and the receiving research group.

- Suitability of the host university and receiving research group: Scientific and technical relevance of the research group to the proposed line of research, available infrastructure for the project.

**3. Potential for the development of the research career:** Up to 20 points. The impact and benefit of the grant will be assessed considering the WIT context (employment prospects, growth potential, industrial applications, connection with Navarre's S4, etc.), based on the following criteria:

- Relevance of the grant for the applicant: fit of the applicant in the WIT Programme in line with the receiving research group and alignment with Navarre's S4.

- Synergies and networking: potential of the researcher to create and propose new lines and synergies in the host institution.

- Potential impact of the grant on the industry: potential applicability of results, capacity to improve the relationship between academia and industry, etc.

- Connection of the proposal with Navarra's S4 and with the region's industry, capacity to establish collaborations and knowledge transfer in the region.





# List of selected applicants

In phase 2, the Evaluation Committee will draw up a list of 16 successful candidates in accordance with the following guidelines:

1. Applications shall be ranked within each of the four WIT areas, based exclusively on the score obtained in the second phase of the selection.

2. Once the ranking in each WIT area has been established, the application with the highest score in each WIT area will be selected first.

3. The next four candidates with the highest score, who were not selected in step 2, irrespectively of their corresponding area, will then be selected according to their score. Out of these four candidates, up to two candidates per WIT area shall selected.

4. The remaining eight candidates will be the two candidates with the highest score from each WIT area and who have not been selected according to their score in steps 2 and 3

5. Ties in the process shall be resolved according to the following criteria and in the following order: (1) preference will be given to the candidate who secures a more gender balance; (2) highest score obtained in the "research excellence" section; (3) youngest age (4) candidates coming from disadvantaged countries; (5) candidates with refugee status.





# 1. STEP OF THE SELECTION OF THE 16 FINAL CANDIDATES

2. STEP

The first 4 candidates who gets the highest score within each area will be selected (the best in Mechatronics, Health, Energy and AI)

4 candidates not selected in Step 1 who have obtained the highest score, irrespective of the area to which they belong, (ranking by the scores obtained)

# 3. STEP

The remaining 8 candidates will be the 2 best placed candidates from each WIT area who have not been selected according to Steps 1 and 2 ranking by the scores obtained.

The provisional list of selected and non-selected applications will be published on the WIT website. Applicants will also be notified by e-mail of the publication of the lists and will receive the evaluation report of their application, allowing a period of five days for the interested parties to make allegations. Allegations must be based on inadequacies related to the procedure, material or factual errors, etc. The scientific-technical considerations of the Evaluation Panel cannot be appealed.

Once any appeals have been addressed, the definitive list of the 16 applications moving on to the interview phase will be published on the website and candidates will be notified by e-mail.

# 3<sup>RD</sup> PHASE: PERSONAL INTERVIEW

The 16 selected candidates will be required to have a personal interview with the principal researcher from the chosen research group along with two members from the Evaluation Panel. The interview may be in person or by videoconference. Prior to the interview, the candidate will be required to apply for admission to their chosen PhD programme. This will ensure that there are no circumstances that would make it unfeasible for the candidate to enrol in the PhD programme.





The purpose of the interview is to ensure the candidate's suitability to receive the grant. It does not entail an additional score, but it is a verification of the candidate's motivation, maturity and communication skills. It will also ensure that there are no circumstances that would make enrolment in the candidate's chosen doctoral programme unfeasible. In the event that, during the interview, a candidate is deemed to be unsuitable for any reason to receive the grant or an inconsistency between the score obtained and the reality observed in the interview is detected, the Evaluation Panel will be asked to re-evaluate the application.

# PROPOSAL OF FELLOWSHIPS AND REJECTIONS

Once the interviews have been completed and the scores revisions have been taken into account (where appropriate and agreed by the Evaluation Panel according to the procedure described above), the definitive proposal for the award of the eight grants shall be approved. A list of candidates who will constitute the reserve list shall also be agreed.

In the event of applicants withdrawing or beneficiaries resigning, applicants from the reserve list may be called up. This shall be subject to the existence of budgetary availability for the award of the new fellowship. The same rules of proportionality by WIT areas previously indicated in Article 10.2.3 will be applied in this call, i.e. a minimum of one and a maximum of 3 grants per WIT area will be ensured, and the reserve list may be extended if necessary to achieve this.

The provisional proposal of grants and rejections will be published on the WIT website and applicants will be notified by e-mail. After this publication, a period of 14 days will be allowed for applicants to confirm their acceptance of the grant by submitting the corresponding document online. Should applicants fail to submit the documentation within this period, they will be considered to have withdrawn their application.

# **5. CONTACT AND INFORMATION DETAILS**

Support Service will be available during the application period via email: <u>wit@navarra.es</u> Additional information available in FAQs document.





# 6. ANNEX I: WIT AREAS, RESEARCH LINES AND RESEARCH SUBLINES/GROUPS OFFER

WIT AREA	RESEARCH LINE	RESEARCH SUBLINE/GROUP	
	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 Martin	
		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 Development and advanced manufacturing	1.C.3 Improved metasurface radar sensors/ Antenna Group / UPNA, Iñigo Ederra	
	of sensors	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	
1AUTOMOTIVE MECHATRONIC S AND		1.C.5 Magnetic sensors for automotive and mechatronics applications / Physical properties and applications of materials Group / UPNA, Cristina Gómez Polo	
ADVANCED MANUFACTURI NG	1.D Eco-efficient mobility management in sustainable urban transport	1.D.1. DECYL Group (Data, Statistics, Quality and Logistics) / UPNA, Francisco Javier Faulín Fajardo.	
	1.E Advanced fuel cell manufacturing	1.E.1 Environmental Technologies and Application Group (TAMA) / UPN 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	
		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.A Hematology: advanced therapies and diagnostic innovation	2.A.1 Hemato-Oncology / Epigenetics group / UNAV, Xabier Aguirre
		2.A.2 Hematology: advanced therapies and diagnostic innovation / Molecular bases of hematological malignancies group / UNAV, Felipe Prósper Cardoso
	2.B Regenerative medicine	2.B.1 In vivo generation of pluripotent stem cells derived organs/ Stem cell biology group/ UNAV, Xabier Aranguren
	2.C Nanomedicine	2.C.1 Nanomedicines and Drug Delivery Group / UNAV, María José Blanco Prieto
		2.C.2. Nanostructure for Therapy Application / UPNA, Manuel Algarra
		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 Preventive medicine	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. HEALTH		2.D.3 Health, diet and lifestyles in adults/ Epidemiology and Public Health Group / UNAV, Miguel Ángel Martínez González
		2. E.1 Complement system and retinal diseases / Retinal diseases and therapies Group / UNAV, Patricia Fernández-Robredo.
	2.E Ophthalmology	2.E.2 Histopathological and molecular analysis of the formation of the myopia biomarker CUVAF (Conjunctival Ultraviolet Auto Fluorescence) in comparison with pinguecula and pterygium / Laboratory of experimental Ophthalmology / UNAV, Sergio Recalde
	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 remodeling and heart failure Group / UNAV-CIMA, Arantxa González Miqueo
		2.F.4 Tissue engineering and additive manufacturing / UNAV, Manuel Mazo Vega
	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 Gene Regulation in Cancer / Long non-coding RNAs and cancer genome Group / UNAV-CIMA Maite Huarte.
	2.H Immunology / Immunotherapy	2.H.1 Oncoimmunology Unit Group / UPNA-Navarrabiomed, David Escors Murugarren
		2.H. 2 Cancer signalling Unit Group / UPNA, Imanol Arozarena
		2.H.3 Protein crystallography and structural immunology Group / UPNA- Navarrabiomed, Jacinto López Sagaseta
		2.H.4 Cancer Immunotherapy Cytokine-based Therapies Laboratory Group / UNAV-CIMA, Pedro Berraondo



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	3.A Energy Grid Integration	3.A.1 INGEPER, Renewable Energy Grid Integration / UPNA, Luis Marroyo Palomo
		3.B.1 Physical properties and applications of materials Group / UPNA, Alberto López Ortega
	3.B Development of advanced materials and technologies for energy production	3.B.2 Quantum materials for energy applications / Antenna Group / UPNA, Iñigo Liberal
3. ENERGY		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
		3.C.2 Circular strategy of fertilization from the recycling of organic waste: synthesis of highly efficient organ mineral sources as an alternative to current fertilization / Biological and Agricultural Chemistry Group / UNAV, José María García-Mina
		3.C.3. Valorization of vegetable organic wastes for health purposes / Vegetable wastes and health group / UNAV, Nieves Goicoechea
	4.A Real-time data processing	4.A.1 Approximate reasoning and artificial intelligence Group (GIARA) / UPNA, Humberto Bustince, Jose Antonio Sanz Delgado
		4.A.2 New developments in information fusion techniques using interval and multidimensional data with applications in computer vision and machine vision and machine learning / Approximate reasoning and artificial intelligence Group (GIARA) / UPNA, Humberto Bustince, Daniel Paternáin
	4.B Spatial statistical problems	4.B.1 Spatial Statistics Group / UPNA, María Dolores Ugarte
4. ARTIFICIAL INTELLIGENCE	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
		4.C.2 Automatic control of life cycles for in vitro neuron cultures using computer vision / Approximate reasoning and <sup>o</sup> 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



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	<ul> <li>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</li> <li>4.C.6 Deep learning in brain-computer interfaces / Algebra. Applications Group / UPNA; Luis M. Ezquerro Marín, Marisol Gómez Fernández</li> <li>4.C.7 New developments in efficient multimodal lifelong learning/ Approximate reasoning and artificial intelligence Group (GIARA) / UPNA, Humberto Bustince, Mikel Galar</li> <li>4.C.8. Personalized medicine determining optimal patient-driven treatments / Design statistics and data analysis group (StatData) in the Institute of Data Science and AI (DATAI) / UNAV, Jesús López-Fidalgo</li> <li>4.C.9. Modelling and prediction of the impact of air pollution and climate change on population health using AI, machine learning and big data techniques / Environmental Analytics (BIOMA) / UNAV, Jesús Miguel Santamaría Ulecia</li> </ul>
4.D Image Processing	4.D.1 Improving deep learning-based computer vision methods using ensembles and advanced information fusion techniques / Approximate reasoning and artificial intelligence Group (GIARA) / UPNA, Humberto Bustince, Daniel Paternáin