



This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 101017436

# **EU-CONEXUS RFS Study**

"GOOD PRACTICES ON TALENT MANAGEMENT, RESEARCH AND INTERNATIONALISATION CCELERATORS"

### 2022

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#### Preamble

This document has been carried out jointly by researchers from the six universities that are part of EU-CONEXUS plus the invaluable collaboration of a researcher from WIT, an associate member of the Alliance.

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The meetings to prepare and write this document took place in the following dates :

— 24th September 2021

UCV proposed the working plan and the structure to the rest of the partners to have their suggestions and comments to improve the structure

— 29th October 2021

The partners gave their comments together with the requested information to be included in each chapter. The final structure was agreed upon.

- 26th November 2021
  A first draft with the main chapters was presented and afterwards sent to the partners for their review
- 17th December 2021

The remarks and modifications from all the partners were included in the document and then a second draft was sent to collect new comments until the 21st of December.

27th January 2022
 During the WP3 online meeting (the face-to-face had to be postponed due to the pandemic) UCV presented the final draft





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### Methodology

For the preparation of this work, the coordinator of this deliverable has prepared a draft, in which three different types of ideas have been incorporated. First, the suggestions made individually by each of the participating researchers, based on best practices in their home research centres, as well as on their own personal experience.

Secondly, official reports from international organizations, such as the European Science Foundation (ESF), the OECD or The Innovation Policy Platform (IPP), developed by the Organisation for Economic Co-operation and Development (OECD) and the World Bank, have been consulted.

In a third step, independent experts from external organizations, such as the World Bank, Kaunas University of Technology, University of Navarra or Yale University, have been consulted.

After all these additions, a second version of the document has been presented to the WP3 members for their study, incorporating suggestions or changes until the final version is built. In order to proceed with this final assessment, a face-to-face working meeting was convened, so that we could move forward together and approve the last version of the document.

The best practices have been classified under three main headings: Talent management, Research and Internationalisation. A fourth section has also been included, with suggestions for improvement on talent management, research and internationalisation for the institutions.

#### Introduction

Unfortunately, in our countries, research is still the poor cousin, with scarce funding, which makes us lag far behind other territories, which devote a much higher percentage of their GDP to this sector. This low investment, on the other hand, causes a flight of the best talent to universities in other countries, breaking the entire value chain of the investment made, in time and money, in young talent. By way of example, spending on universities is 0.95 % of GDP across the EHEA (European Higher Education Area), 1.1% in EU, a far cry from the 2.5% in the United States.





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Good practices and proposals for improvement on "Good practices on talent management, research and internationalisation accelerators" will make our universities more solid, attractive and prestigious worldwide.

### Talent management

#### Introduction

Developing young talent in the world of research is a key factor for the future development of society (e.g. Europe 2020). The world of work demands a skilled, motivated and responsible workforce as a fundamental factor for competitive improvement and growth. This is one of the main challenges faced by the EU. This development must necessarily be achieved through cooperation between three key players: stakeholders, universities and students. However, the reality is that there is still a significant gap between employers and university graduates. European projects such as GETM3 (<u>www.getm3.eu</u>) or Talent 4.0 (<u>www.t4lent.eu</u>) are trying to offer solutions to break down these barriers.

EU-CONEXUS aims to bring together the concerns and requirements of these three sectors: stakeholders, universities and graduates, avoiding barriers that make their employability difficult. To this end, we propose a greater dialogue, for example, facilitating the active participation of employers in the design of graduate degrees or using active methodologies, such as learning based on the solution of real business problems.

#### **Good practices**

1. Involvement of PhD candidates in teaching classes and practical seminars

One of the biggest difficulties for young doctoral students is getting university teaching experience. Therefore, without forgetting that candidates should mainly develop research tasks leading to the completion of their doctoral thesis, we suggest promoting their participation in teaching tasks, always under the supervision of a senior professor, without taking responsibility for the subject and with a teaching occupation that enable him to carry out his main activity, his doctoral thesis, with solvency.

By acquiring this experience, they will be more competitive in the future and will be more confident when teaching their first independent classes.

Some examples in EU-CONEXUS:

At UTCB, during PhD studies, the candidates are actively involved in teaching classes and practical seminars. In their contract with the PhD School and





according to Romanian laws they can teach 4 to 6 hours weekly during their threeyear studies interval.

All PhD students at KU have to teach 100 hours during their 4 years of doctoral studies

In line with international best practice, all WIT PhD Scholars are required to undertake 168 hours of academic development activities over the course of their 4-year PhD programme funded by WIT.

At LRUniv, in 2020, 28% of PhD students conducted teaching activities.

At UNIZD, all PhD students employed by the University of Zadar are involved in teaching process under the supervision of a senior teacher/researcher. This academic year (2021-2022), there are 77 employed PhD students involved in teaching process. PhD candidates in the position of research/teaching assistant have the obligation to perform 150 standard (teaching) hours per year

# 2. Encouragement to take part in projects funded at national and international level to help researchers progress professionally

Another proposed strategy is to involve young researchers as soon as possible in the different research projects developed by the research group in which they are enrolled. It is considered of particular interest to them that they can gain experience, develop their skills and gain in-depth knowledge of research strategies, taking on increasingly important responsibilities.

UNIZD encourages young researchers to participate in scientific and professional projects based on international and national funds (Horizon, Croatian Science Foundation, etc.). University has also an institutional project funding program to support researchers. Young researchers are stimulated to be part of teams aiming to obtain scientific experience. They are under the supervision of a senior researcher. Such projects are created as a preliminary step of advancing in their own applications to be submitted in the following years. Currently, University of Zadar has 57 projects in progress (scientific and professional).

LRUniv offers the possibility of a teaching discharge and of a "teaching gap year" for researchers who participate in projects funded at national and international level.

#### 3. Researchers become mentors for students

Having the support of a senior professor can accelerate the career of young researchers, allowing them to consult doubts and receive advice from more experienced people, to help them avoid common mistakes and improve their progress in a long and complex career.





As a practical example, in UTCB researchers are mentors for the University's students, attending competitions together with their students on a voluntary basis. Both mentors and students' groups attended national and international student competitions as follows: "Prima Development", "Traian Lalescu", "Statics of Constructions", "Hydro technic Trophy", "Wooden Layouts of Bridges and Farms", "Construction Materials used in transport infrastructure", "Carpatcement Competition", "Resistance of Materials C. C. Teodorescu", International Competition Modelling Metallic Bridges, Istanbul, Turkey, 2019. Therefore, this type of activities strengthens the collaboration between students, MBA and PhD candidates and researchers

WIT's The ODYSSEY Researcher Mentoring Programme enable Early Career Researchers (Mentees) to receive encouragement, support, guidance, specific skills and knowledge from more experienced Researchers (Mentors) that will enhance the Mentees career and personal growth during their research journey at WIT

#### 4. Training for researchers and professors on how to apply for funded projects

A key aspect of a young researcher's career progression is his or her participation in funded competitive research projects. Knowing in depth the procedures and the keys to write a good proposal; being informed about the strategic calls to apply for (regional, national or European projects); knowing how to design the budget, create a work team, etc., are topics that are not easily or quickly learned. Therefore, receiving training from experienced researchers is a key aspect of improvement for these researchers.

UNIZD provides educational programmes, workshops and trainings for research and teaching staff in project management. University ensures educational programmes necessary for leading scientific and professional projects on national and international level. Office of science, projects and technology transfer at university also provides all necessary operational support. The Office informs researchers about available calls for projects and helps in writing the project application as well as in the implementation itself.

LRUniv provides PhD students with a training on research funding.

 Involvement of young researchers in teams created for projects to help them submit future own applications, offering incentives for efforts made to original ideas

In line with the previous proposal, LRUniv fosters the participation of young researchers who have occupied their position for less than 5 years in specific "calls for young researchers". This is an example about the importance of





including them in the design of the projects, encouraging them to play an active role and thus learn in depth the strategies and methodologies for writing them.

6. Attraction and retention of talented researchers and professors through a university support fund

Attracting and retaining talent must be a priority for universities, to avoid the brain drain that is so damaging to progress in universities that have welcomed early-stage researchers. This fund, which would make it possible to finance the progress of their research (laboratory materials, participation in congresses, research stays in other centres), is intended to make it more attractive for researchers to remain at the university and thus develop their full potential.

As a practical example, Business initiative and citizen involvement via the Future Support Fund of Klaipeda University seeks to strengthen business and research cooperation, the implementation of new ideas and services, and the transfer of knowledge to support the development of relevant scientific innovations and technology. At present, it is taking steps to build up an endowment capital fund and become the second university endowment fund in Lithuania

In France, following a national plan, LRUniv has implemented a junior professor chair to attract best talent

7. Excellence rewarded by the Rector's Award or by the Department (lifetime achievement award, outstanding achievements in scientific research, outstanding achievements in teaching, successful cooperation with institutions and economy, outstanding commitment)

The purpose of this proposal is to identify and recognize a job well done, with the aim of highlighting the research efforts of some of the team members. This recognition undoubtedly encourages the researcher to see how his or her efforts are taken into account. Likewise, it reinforces the interest of colleagues to try to achieve similar goals in the future.

UTCB organises an Award Gala Event for Young Researchers. The Gala contributes to a better involvement of young employees in research activities and increases the number and quality of educational and research projects. The awardees are working in UTCB faculties, some of them are teachers and some are PhD candidates.

The WIT Research Excellence Awards recognise the outstanding contributions of WIT academic and research staff to high quality, innovative research that enhances the reputation of the Institute both locally and internationally. Award categories include Early Career Researcher; Established Researcher; Research Impact and Research Supervisor Award.





8. University-business agreements to set up internships in companies developing innovation projects and increase technology transfer, based on fairs attendance and permanent dialogue with Advisory Councils (Universities organise regular fairs facilitating the exchanges between companies and researchers)

Encourage interaction and dialogue between the university and the company, enabling young researchers to develop their talents as part of their training process. To this end, it is proposed to take advantage of the multiple opportunities to strengthen this cooperation and to serve as a technological accelerator for these researchers.

At UNIZD academic staff (but also non-academic staff and students) is awarded every year in a different area (lifetime achievement award, outstanding achievements in scientific research, outstanding achievements in teaching, successful cooperation with institutions and economy, outstanding commitment). Some departments have their own practice of rewarding the best staff in the above-mentioned categories.

At UTCB, 8 young researchers were awarded internships in December 2021.

At LRUniv, there is a liaison person per socio-economic field in charge of putting in contact companies and students for internships.

9. Support to students in entrepreneurship to transform their idea into a business plan, preparing the future of professionals and encouraging them to keep a close contact with their Alma Mater

To this end, it is proposed to accelerate the introduction of the methodology for solving real problems in the business world in the training of master's degree students. This incipient dialogue between one and the other will make it possible to accelerate innovation and knowledge in both sectors, which are essential for knowledge transfer. As an example, In France there is a status student/entrepreneur, that allows students and young graduates to develop an entrepreneurial project in a PEPITE (Student Centres for Innovation, Transfer and Entrepreneurship). The "student-entrepreneur" establishment diploma (D2E) accompanies the student-entrepreneur status: it allows students to carry out their project with maximum security and visibility. Likewise, LRUniv/CampusInnov, aims at stimulating a dynamic of innovation contributing to the development of the socio-economic environment.

10. Active promotion of participation in academic training programs or interdisciplinary collaboration programs between academics and students

The research training process should be broad enough to allow the trainee researcher to participate in different cross-cutting courses. This will allow him/her to have a holistic and much broader view of the different requirements and





demands of a research career in the medium term. All the collaborative work between academics and students is little to achieve this goal.

As another practical example, in 2021, KU started the Blue Growth Leaders Academy for business leaders, scientists, NGOs and any professionals interested or already working in the Blue Economy or adjacent sectors. This international programme offers an opportunity to meet top experts from all across Europe (Denmark, Sweden, UK, Norway) and become a part of a networking platform dedicated to the Blue Economy. To make the program as practical as possible, the participants receive guidance and feedback from the seasoned investors. Consequently, participants have opportunity to pitch their ideas and attract seed money for real life scenarios.

WIT Research Brown Bag series is a platform for researchers in both institutes WIT and their merging partner ITC (Institute of Technology Carlow) to present their research, share ideas and identify possible collaborative research opportunities as part of the collective journey to becoming a technological university.

11. Yearly evaluation of research and teaching staff career plans and working conditions, Including their achievement / performance. A common core curriculum to develop professionalisation (presentation skills, scientific integrity, ability to raise funds...)

Ongoing evaluation is a fantastic tool, reminding researchers of the objectives to be met and serving as an impetus not to forget those goals to be reached. Including transversal skills in the training curriculum will substantially improve the research potential of candidates.

12. Transparent and professional recruitment by public tender – recruitment is conducted by criteria: previous relevant achievements, knowledge of skills testing and interviews

The development of increasingly objective criteria that take into account academic contributions and avoid inbreeding should be privileged. Blind peer review and the incorporation of the best talent should be strategic requirements.

LRUniv has put in place a committee composed of an internal and external jury for all permanent researchers and teachers.

13. Economic support of students (scholarships) and awards for their achievements

We consider it essential to increase the number and quality of predoctoral and postdoctoral fellowships for candidates of excellence, since this figure has been recognized as very useful for generating high quality knowledge and with very good results in the subsequent professional and academic insertion of the candidates.





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#### 14. Training on electronic sources of information (database, electronic journal...)

Strengthening skills and capacities in these cross-cutting issues will be of great help to researchers, as these are essential skills for researchers in training. This training should also be included in the PhD studies.

KU has established a Department for Electronic Information and Scientific Communication. Their functions are: consultations for researchers about electronic sources of information, publications; provision of electronic services; subscription to electronic databases; preparation of the following databases: Lithuanian Academic Electronic Library (eLABa); KU database of scientific publications; Database of full-text articles in KU scientific journals; trainings for researchers (e.g. open access publications etc.)

#### 15. Set up of a common structure bringing together all HR for research

Often, the different research teams are disconnected from each other, which greatly hinders joint work, close collaboration and the possibility of generating interdisciplinary or multidisciplinary projects. Generating a single structure that brings together the research of the different departments and faculties makes it possible to integrate and accelerate this research within the university. It also makes administrative procedures easier and creates synergies for sharing management staff.

### 16. Financial support and time in order to enable researchers to take executive positions and in project coordination

It is very common for young researchers to occupy, for too long, secondary positions in research projects. Promoting their participation in positions of recognition, in calls for young talents or in co-direction with a senior researcher, helps them to improve their positions in their research career, and at the same time encourages them to learn these tools that are so necessary in their career.

UCV promotes participation in emerging research projects funded by the regional government. It also offers internal funding to all those who apply to this external call, which serves to start as the head of a young research team.

LRUniv offers a bonus or teaching/job activity discharge for researchers taking executive positions in project coordination.

### 17. Research acceleration centres with initial funding for researchers (before they receive grants)

An innovative research centre can generate the perfect atmosphere for effective multidisciplinary work in contact with society and this working environment





accompanied by seed grants for young talents has proven to be an excellent practice to accelerate quality research.

A good example of this initiative could be the iLabs Center for Innovation Research at Michigan-Dearborn University <u>https://umdearborn.edu/cob/business-</u> <u>community/ilabs-center-innovation-research</u>

# 18. Awards of Investors' Spotlight Quality Labels for study programs that best meet the needs of the market. (Example of Invest Lithuania project)

This initiative aims to highlight the importance of dialogue between business and universities, promoting closer cooperation to strengthen joint research. It is intended to recognize the best cooperative work between both worlds. This is of particular importance for young researchers but is also of interest to senior and experienced researchers. The example that has inspired this proposal is a specific contribution from a public company promoting foreign investments, which through this recognition wants to accelerate innovation and talent in Lithuania. At KU, there were 2 programmes awarded in 2019, 3 in 2020 and 1 in 2021. Programmes that receive Spotlight award receive additional scholarship.

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## 19. More attractive career possibilities: junior professor chairs in order to become a full professor

This is an initiative that aims to make visible and highlight the merits of young researchers of outstanding merit, without the need to reach the rank of full professor, which requires, in addition to merit, seniority incompatible with youth. Since this year (2022) this chair exists at LRUniv

#### 20. Need to develop specific means to enable researchers to come with their family

The mobility of researchers can only be achieved if both the centers of departure and destination provide facilities so that it can be carried out as a family. Especially the receiving research centers should offer services that are also attractive and affordable for families (support in the search for a residence, schools, complementary cultural and leisure activities, etc.).





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### Research

#### Introduction

One of the basic and main missions of the university, although not the only one, is to offer research of excellence, as an engine of knowledge, basic and applicable to society. A society that researches and innovates is a modern and developed society.

Being at the forefront of the most competitive global societies is key to progress and wellbeing. In this sense, universities have a high responsibility and commitment to society.

"Achieving sustainable growth in a competitive world is challenging. The challenge is even greater for the European Union, as the Old Continent faces a severe competitiveness deficit" (European Economic and Social Committee, 2015)

"Universities will be essential to the research process and will be strong drivers in this endeavour, collaborating with a variety of different partners. Universities will continue to expand the frontiers of knowledge in order to better understand the physical universe and the human condition. While fundamental, curiosity-driven research will be a precondition for knowledgebased solutions" (EUA, 2021. Universities without walls. A vision for 2030).

#### **Good practices**

## 21. Access to equipment and facilities + mentoring by specialised personnel in the university research institutes and educational centres

From the beginning of your career as a researcher, you should be given access to the equipment your colleagues are working with, so that you can familiarize yourself with it as soon as possible. Any effort to accelerate their integration and accelerate their training process will result in faster and more effective training.

An example of this would be the Health Safety and Environment training together with the training of equipment at LRUniv.





#### 22. Increase the use of owned infrastructures by researchers coming from abroad

Sharing research infrastructures allows teams to advance more quickly. As a previous experience, EU-CONEXUS has shared an inventory of scientific equipment so that it can be used by a larger number of researchers. Sharing and internationalization lead to more efficient research.

### 23. Attendance of competitions by research mentors and students, awarding them with financial and academic stimulants

There are many successful initiatives in this regard. From hackatons, explaining your thesis project in three minutes, to awarding the best scientific poster or the best article of the year are initiatives that allow you to work with more motivation, encouraging healthy competition and the spirit of self-improvement.

#### 24. Creation of a Young Researchers Committee under EU-CONEXUS

This body would make it possible to bring together and make visible the work being done by researchers, encouraging their visibility and providing them with the means to carry out quality research. It would serve as a loudspeaker for the concerns of researchers in training, increasing their visibility in the research structure of the consortium.

There is a Postgraduate Researcher Forum in WIT for all Postgraduate Students

### 25. Organisation of yearly conferences to increase visibility of the research community and exchange knowledge

Being able to present in public and share with the rest of the scientific community one's own advances, but also those of the rest of the team, allows us to learn from others. This is a double learning process that should be encouraged. Young Researchers' Conferences, Seminars on New Scientific Developments are actions of the utmost interest, which would be highly efficient in an international context. Together with the Research Hours already in place, it would increase visibility and improve connectivity between researchers from different centres and countries.

Research Sparks is an event for all WIT Staff to hear about some of the exciting research being conducted in the Institute. A series of short presentations from researchers across the six schools in the Institute, showcasing the variety of interesting work underway. WIT Research Day is an annual event that brings together postgraduate students from across the six schools of the Institute, to showcase the breadth and depth of research activities being undertaken and the knowledge generated by such.





LRUniv organises SmUCS days and during the Science Fair (annual event at national level) the university gathers researchers from different labs, providing presentations and workshops open to the public, across the city.

26. National excellence support tools (research and thematic conversion leave, national system in charge of careers...), using the Badges system.

This badges system is a structure of symbols that people can earn through accomplishing various tasks that illustrate their knowledge and skills. Previous experiences show that usability issues, increased faculty workload, and a lack of understanding of the badges' purpose and value were the main factors which negatively impacted badge adoption (Stefaniak and Carey, 2019)

# 27. Develop greater cooperation with the regional government to support the university's research.

Working hand in hand with the different regional governments allows us to establish synergies, reinforce regional research priorities and generate a collaborative ecosystem that will accelerate research. This collaborative work is considered strategic and a success factor.

#### 28. Open access publications

Support from each university the Open Access policy, providing researchers with the means to achieve these objectives.

At the end of 2020, KU approved a new KU development strategy until 2030 (Strategy 2030). For the successful implementation of the Strategy, Action plans are elaborated for every 2-year period until 2030. The Action plan covers 3 areas of the University activity: Studies and LifeLong Learning, Research and Innovations, Resource management and prosperity. "Open access publications" Criterion is included in the KU Action plan as one of the indicators of effective research activities. Monitoring is carried out every year - the number of open access publications is calculated, compared to the indicators of the previous year. KU Science and Studies Foundation also support articles publication in open access publications. At KU, this percentage reaches 90%.

LRUniv has an archive open access system platform where researchers can upload their articles

#### 29. Development and acquisition of objects, intellectual games

Methodological and technical support to researchers so that they can carry out their work in the best conditions and with the latest developments in the world of knowledge is another of the high-value initiatives that should be supported.





The team of students studying Mechanical Engineering "Lithuanian Spirit" almost every year participate in international Aventics Pneumobile Competition. The first pneumatic car at Klaipeda University was developed in 2015. A new team of engineers developed the American Chopper-style pneumatic car in 2017. Later, due to changes in the competition rules, in 2018 - "Car" type pneumatic car. A new type of pneumatic vehicle with a weight of about 100 kilograms was prepared for 2021 year's competition. According to the rules of the competition, the maximum speed achieved during the tests was 58 km / h, with one 10-liter compressed air balloon (200 bar) the longest distance exceeded 10 kilometers.

# 30. Innovative creative projects initiated by students: foster students' involvement in the development of innovative products, services, technologies

Involving students in the last years of their degree in research tasks, making them participate as collaborators in projects, allowing their final papers to become their first scientific articles or encouraging their participation in scientific congresses for young researchers is an action that ensures having an adequate pool of young research talent. Getting them to participate fully in the teams, to mix with researchers at more advanced stages in their careers is an initiative that ensures continuity.

#### 31. Promotion of Joint Research Projects (measure of real integration)

Designing and building research projects between researchers from several countries (and EU-CONEXUS is a good laboratory for this) is an excellent opportunity to share and advance together, internationalizing research in the most practical way and encouraging the future publication of joint results between the different researchers of the projects. A call for joint projects, in which the participation of at least young researchers from four universities of the consortium would be indispensable.

Promoting the joint construction of project through an internal call for project for PhD thesis within the framework of EU-CONEXUS

#### 32. Hosting researchers from national and international research organisations

If researchers from different countries can work together and share their experiences, methodologies and techniques, this will considerably increase the quality and impact of this research.

In this regard, LRUniv has an inbound mobility funding for visiting researchers.

#### 33. Cooperation of departments in interdisciplinary research

Very often, researchers work in isolation, unaware of the work being done by colleagues in other areas and other departments. The promotion of this knowledge





will accelerate the highly recommended and necessary interdisciplinarity and multidisciplinarity. One example among many would be a combined project between Social Sciences and Telecommunications, or another between Human Geography and Statistics.

UCV promotes this type of projects, including researchers from different faculties and areas of knowledge. As an example, a recent project presented, combining researchers from Social Sciences with others from Computer Science or Telecommunications from other faculties.

LRUniv encourages this cooperation through SmUCS Institute and funding. There is a call for project related to SmUCS topics. A laboratory from the university is interdisciplinar and makes researchers from several disciplines work together. LRUniv is working on a SmUCS federation with the CNRS to construct an interdisciplinary workspace

### 34. University office of research support identifies calls and its compliance with university strategies

The idea underlying this measure is to privilege the work of orientation and promotion of research by the research support offices. Having the support of qualified technical personnel will ensure a higher success rate in the competitive projects presented and will ensure a better return on efforts, especially that of young researchers.

#### 35. Post-doctoral grants (Marie Curie) and under evaluation co-fund programmes

One of the main problems for young PhDs is the lack of professional positions, so any support for them to apply for Marie Curie or other postdoc fellowships is very little and would be of great help. Short funding to boost projects applied for and not yet awarded would be a big step forward

WIT has received a number of MSCA Funding awards including individual and global fellowships and they have also led a number of larger MSCA projects such as ITN, IAPP.

Two incoming MSCA post-docs per year are hosted in LRUniv. This university foresees to submit a proposal for a PhD programme to 2023 MSCA cofund call.





### 36. Start a pilot on data collection to produce the mature indicators, follow them over time and use them in strategy development

Establishing a continuous evaluation of quality standards is essential, as it allows correcting errors and proposing strategies for improvement in the medium term. Some examples would be: number of articles published in high impact journals, number of European projects funded or number of patents. This started in 2019 at KU

At LRUniv, some KPIs related to projects and patents are monitored and a national labs auto-evaluation takes place every 5 years.

### Internationalisation

#### Introduction

Europe is a transnational ecosystem, which must work together to advance education and research. Working as a team, among the various countries of the continent, is a necessary step to be attractive and competitive.

"The future of Europe's universities will be transnational. International cooperation will continue to provide a prerequisite for high quality research and innovation, as well as learning and teaching. Universities are showcases for peaceful and constructive European and international cooperation. They also nurture a positive and reflective attitude towards a European identity, in addition to global, national and regional ones, and will do so in the future" (EUA, 2021. Universities without walls. A vision for 2030).

"Mobility of students, scholars and programs; reputation and branding (manifested by global and regional rankings), and a shift in paradigm from cooperation to competition were the main manifestations of the agenda of internationalization in higher education over the past 30 years. International education became an industry, a source of revenue and a means for enhanced reputation and soft power" (de Wit & Deca, 2020)





#### **Good practices**

37. Monitoring the international orientation of the University through the research production

Indicators of joint publications in international co-authorship, as well as research projects with international teams, are two distinctive features of a university's excellence. Monitoring annual progress in this field will serve to establish elements for improvement in the medium term.

38. Development of double degree programmes (at least with two other foreign university)

It is a strategy that allows for an exponential increase in international collaboration and mobility among students and professors. In fact, it allows a greater connection between researchers from different universities. LRUniv has already undertaken the development of a Blue Biotech programme.

#### 39. Encouraging researchers' mobility

It would be possible through the Erasmus+ programme, CEEPUS (Central European Exchange Program for University Studies), EU-CONEXUS and other Bilateral Cooperation Agreements.

Any effort to facilitate mobility will be very welcome, since it is an instrument of recognized usefulness to get to know professors and researchers from other cultures, other ways of doing things and other methodologies. Working together considerably strengthens research capacity. More mobility means more internationalisation, and more internationalisation means better research and an increasing impact in society.

LRUniv launches and annual internal call for incoming and outgoing research mobility as well as for PhD mobility.

# 40. Support of English language teaching to increase opportunities in the academic and scientific environment, as a tool meant to support dissemination for publications written in national languages

Often, the difficulty of communicating, orally and in writing, in impeccable academic English makes the visibility of their research difficult and consequently penalizes the impact of their work. Having a support service will improve your performance and impact. This support service would allow a final check of articles translated into English before submission to journals but would also train professors to teach in English or prepare a presentation at an international conference in English.





UCV offers a free English translation service for UCV researchers who submit an article to an impact journal. In the case of co-authorship with external researchers, the proportional part is financed.

LRUniv offers English language trainings for researchers, teachers and administrative staff.

41. Measuring and accelerate the following indicators:

- a. Number of researchers coming from abroad.
- b. Number of researchers of the organisation who went to a foreign organisation.
- c. Inward mobility supports an influx of talent from all over the world. Its indicator measures the attractiveness of a country for talent from other European countries and from outside Europe.
- d. Outward mobility supports career development of researchers, international experience, mutual learning. Its indicator measures the capability of nationally educated researchers to have an international research career as well as the opportunities of national researchers to accumulate knowledge abroad.

### Areas of improvement

#### Introduction

The three pillars identified in this report of proposals (talent management, research and internationalisation) are considered key to improving the quality and competitiveness of European universities. It is a key strategy to strengthen Europe's role in the global arena.

The proposals outlined here have been successfully tested in other HEIs and will undoubtedly serve to increase the quality, visibility and excellence of the EU-CONEXUS Alliance. They are recommendations that we propose to be carefully analyzed by the governing bodies of the nine universities of the Alliance, but also globally, by the EU-CONEXUS Research Council and the EU-CONEXUS Governing Board.

**42.** Other measures concerning the organisation and evaluation of research, research connected to business and society, simplification

Bureaucracy too often demands more time from researchers than the research itself. A reduction in bureaucratic burdens, associated with a simplification of procedures, both for research projects applications and justification, will encourage more researchers to continue with this task, avoiding the phenomenon of the





burned-out researcher, who often abandons applying for new projects in the face of these obstacles that consume so much energy. For example, accelerating the digitalization of many administrative activities and the use of ICT.

### **43**. Recruitment of full time enrolled person dedicated to research HR policies (SWAFS, HRS4R *policy*)

The support of specialized technical personnel familiar with academic language and procedures, the drafting of research projects or the design of budgets, can increase the impact and success rate of researchers, which makes it a strategy of extraordinary interest.

LRUniv has hired a specialist to work on this (February 2022) and WIT appointed a HR Business Partner for Research who also manages the HRS4R for the Institute

44. Implementation by employers of criteria included in the European Charter for researchers and code of conduct for the recruitment of researchers

It is considered key for universities to align and follow as soon as possible the quality criteria established by the HRS4R strategy established by the European Commission. This would also help to achieve a higher level, closer to international standards, making it more attractive to researchers and students. WIT has been awarded the HR Excellence in Research Award in 2014, sucessfully retained in 2016 and most recently in 2021 at the award renewal phase. WIT introduced the OTM-R policy for the effective recruitment of funded research staff in 2020

45. Development of a European Network for Research Developers

This organisation would support the professional development of researchers by working together with institutions striving for research excellence, innovation and impact.

Its objective would be to strengthen its members' institutional provision for the professional development of researchers through research and innovation, training and resources, events, consultancy and membership:

This initiative is already underway in UK (Vitae).

# Ongoing initiatives within EU-CONEXUS Alliance





According to the analysis of the good practices implemented in our Alliance's universities, we have ranked them in order to achieve real and gradual homogenisation of those practices in the Alliance.

For this purpose, our top-priority practices to retain talent and foster its development will focus on two main areas:

- 1. Support to young researchers
- 2. Internationalisation promotion and acceleration
- Support to young researchers provides the basis for the development of longlasting cooperation networks favouring the competitiveness of research groups and continued access to funding. This can be reached by carrying out different initiatives such as: mentoring, training, networks development, economic support and career development programmes.

EU-CONEXUS Alliance is undertaking several projects in this regard. One of these is the deployment of a Mentorship platform will which allow mentees to learn by example, receive encouragement, advice and access the necessary knowledge, skills and resources to advance their careers and achieve their career aspirations and potential in aspects related to entrepreneurship for instance.

Universities which have not still received the label HRS4R are preparing their candidacies for 2022. Along the next two years, there are workshops planned to enhance researchers' transversal and transferable skills (from September 2022 till December 2023), to boost their networks and to have greater access to funding (Researchers' workshops in different locations: the first one in Athens May 9-12, 2022).

The Alliance's Gender Equality Plan – presented October 29<sup>th</sup> 2021-, has been designed to guide all our universities to foster equality in scientific careers and integrate the gender dimension in research and innovation content. A series of training courses for staff and researchers will be available as of mid of 2022. The coursers include objectives aimed at raising awareness about the gender gap and how to reduce it and at reviewing assessment of researchers' performance and eliminate gender bias.

And what best practices out of the Study of best practices will be proposed to be added to these already ongoing initiatives? And how?

2. Promoting internationalisation acceleration in research will guarantee the competitiveness of our economies and keep the path for development of our societies.





This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 101017436

EU-CONEXUS-RFS is implementing a series of measures in order to foster exchange programmes, joint research projects and a common policy for the use of research facilities and infrastructures.

Ongoing initiatives such as the implementation of an Innovation Hub and Research Portal (which have already been presented), a Research and Innovation Information System (still being defined and designed but that will cover the other two), the mapping of research facilities and services prior to the definition of a common policy and strategy for access to joint infrastructures and the training programme of available services bear witness to the will of creating a real common research area among the university partners, which will be fully operative by the end of 2023 (according to the timeline which was defined for each of the tasks).

### **Final Remarks**

The three pillars identified in this report of proposals (talent management, research and internationalisation) are considered key to improving the quality and competitiveness of European universities. It is a key strategy to strengthen Europe's role in the global arena.

The proposals outlined here have been successfully tested in other HEIs and will undoubtedly serve to increase the quality, visibility and excellence of the EU-CONEXUS Alliance. They are recommendations that we propose to be carefully analyzed by the governing bodies of the nine universities of the consortium, but also globally, by the EU-CONEXUS Research Council and the EU-CONEXUS Governing Board.

For universities to have a clear strategy on how to make progress on the issues outlined in this report is key to being able to adapt to the new challenges of society.

This report is intended as a proposal with specific and direct actions for improvement as well as further steps, which will hopefully serve as an inspiration for the European higher education system in general and the EU-CONEXUS Alliance in particular. It is also a challenge for policy makers in the regions and countries involved in this initiative to support these proposals. We will succeed in meeting these challenges if our universities are open to society, dynamic and with strong values.





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