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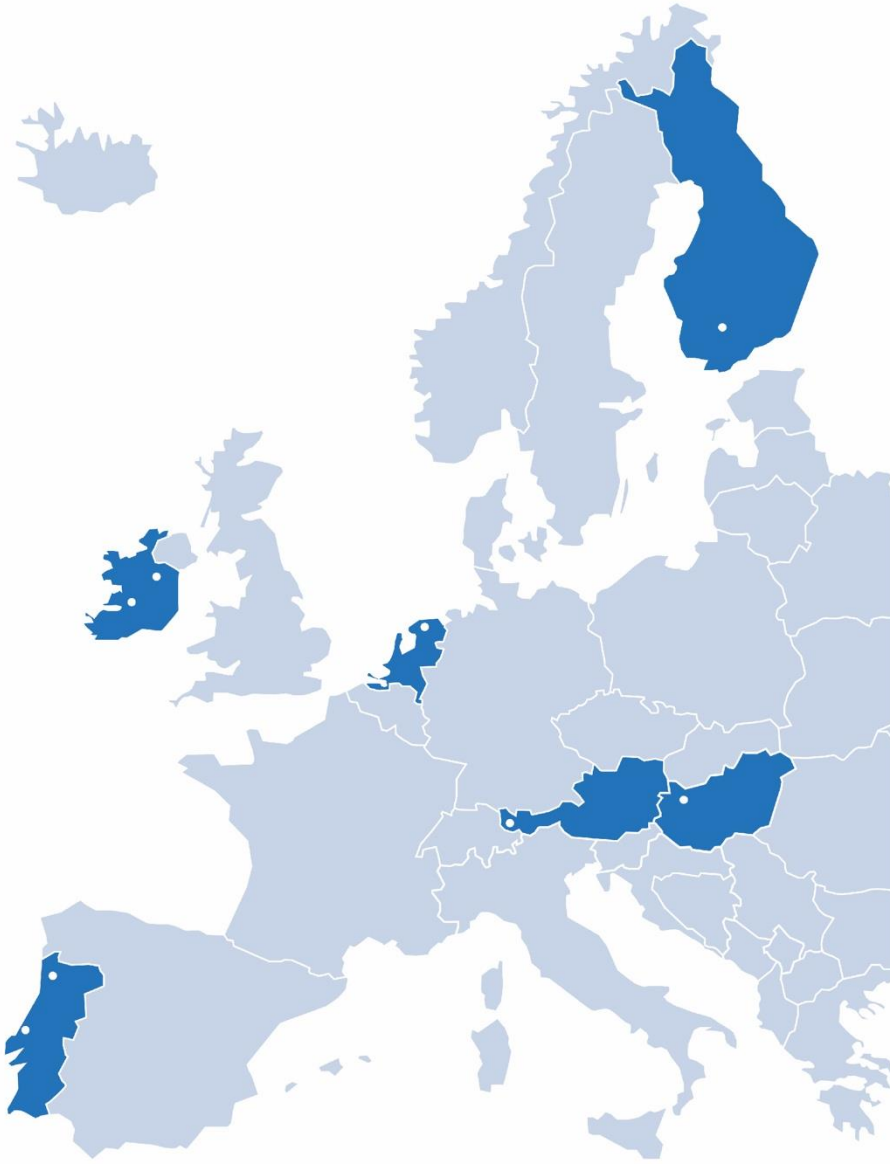

D4.4 ANNUAL REPORT ON THE IMPLEMENTATION OF THE RESEARCH CAREER DEVELOPMENT FRAMEWORK TRAINING WORKSHOPS – 2ND REPORT

Type of Deliverable: Report, Public

September 2023

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Vorarlberg University of Applied Sciences (FHV), Austria,
Polytechnic of Cávado and Ave (IPCA), Portugal and
Technological University of the Shannon: Midlands Midwest (TUS), Ireland.

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Abbreviations

API	Application Programming Interface
D	Deliverable
DMP	Data Management Planning
ECoC	European Code of Conduct for Research Integrity
EIH	European Innovation Hub
FHV	Vorarlberg University of Applied Sciences, Austria
HAMK	Häme University of Applied Sciences, Finland
IP	Intellectual property
IPCA	Polytechnic of Cávado and Ave, Portugal
IPL	Polytechnic of Leiria, Portugal
MS Forms	Microsoft Forms
MS Teams	Microsoft Teams
NHL Stenden	NHL Stenden University of Applied Sciences, The Netherlands
RUN-EU	Regional University Network – European University
RUN-EU PLUS	Regional University Network – European University: Professional Research Programmes for Business and Society
SAP	Short Advanced Programme
SZE	University of Györ – Széchenyi István University, Hungary
T	Task
TUS Ireland	Technological University of the Shannon: Midlands Midwest,
WP	Work Package

1. Introduction

The RUN-EU PLUS project is strongly engaged with enhancing support activities that develop strong competencies in research and transferable skills in RUN-EU researchers and which empowers them with the ability to plan their future career and learning paths. In the process we lean to educational practices as essential means for structuring and disseminating knowledge.

This document describes the RUN-EU PLUS WP4 (Strengthening Human Capital) activities implemented during Year 2 of the project (from October 2022 to October 2023). The RUN-EU PLUS project work packages are strongly integrated, and, in this regard, it is at times relevant to report some activities in more than one deliverable. This **D4.4** report is focused on the following three themes: 1) the implementation of the RUN-EU researcher training programme, 2) the Pilot Study of the Researcher Career Development Evaluation Tool, and 3) the development and roll out of the Cloud of Knowledge Portal. In addition, the role of Gender and Diversity Ambassadors in these activities is also reported.

RUN-EU PLUS **D4.2 Researcher Career Development Training Workshop Programmes** previously presented the full training programme and its development. In this **D4.4** report, an updated programme and a description of its implementation is presented. RUN-EU PLUS **D4.6 RUN-EU PLUS Research and Career Evaluation System** has previously provided insight into the creation of the system. This report describes a Pilot Study which tests the system in the context of supporting RUN-EU researchers in their career development and presents its main results. The Cloud of Knowledge Portal has been under construction and this report summarises this process and the further steps being undertaken in launching the Portal are presented.

D4.3 Annual Report of the Researcher Career Development was the first of 3 annual RUN-EU PLUS reports of WP4, and this **D4.4** report is the second. Regarding the training programme the report has been limited to an overview of its implementation

as there have been many training activities and events provided for RUN-EU researchers during the academic year 2022-2023. Suggestions for improvements are reflected in the last section of this report. We reflect upon RUN-EU PLUS researcher training topics and other activities also in the light of the European Universities Association - Council for Doctoral Education (EUA-CDE) survey (2022) results.

2. RUN-EU PLUS Researcher Training Programme

2.1 Background to the Researcher Training Programme

The target group of the researcher career development training programme is the RUN-EU researchers of every career stage. In the first annual report (**D4.3**) we described the close working life connections of the University of Applied Sciences, which classifies several RUN-EU partner institutions. While this classification of university carries an emphasis on teaching, the need to strengthen research capacity along with both related skills and possibilities is recognised. The RUN-EU PLUS Researcher Training Programme has proven and continues to be an effective channel to achieve this goal. The RUN-EU alliance also has university members that have an established profile in both applied and basic research. The differences within the universities have added a richness to the RUN-EU collaboration also into the training possibilities.

A key objective of the RUN-EU PLUS project has been to design a framework for a Researcher Career Development Training Programme and implement 3 workshops annually under its WP4. RUN-EU PLUS took the opportunity to develop a long-term researcher career training programme for RUN-EU researchers instead of focusing only on the short-term researcher requirements. The training themes have been selected based on the long-term career training needs of RUN-EU researchers as identified in the audit and GAP analysis of current human capital resource strategies and practice across the RUN-EU PLUS consortium (**D4.1**).

The basis for the RUN-EU Researcher Career Development Training Programme originates from the RUN-EU PLUS Grant Agreement (Number 101035816), the RUN-EU PLUS audit and GAP analysis of current human capital resource strategies and practices of RUN-EU partner institutions (**D4.1**) and also other research skills information sources including the EURODOC description of transferable skills (SuperProfDoc 2017) and the research skills identified in other Horizon 2020 programme development projects (including the DocEnhance project). While core researcher competencies are developed by researchers in their RUN-EU PLUS master's and doctoral programmes, transferable skills and successful career planning and development are provided by the Researcher Career Development Programme. The planning and implementing RUN-EU master's and doctoral research programmes have been under development in other RUN-EU PLUS WPs (WP3, WP6) and they are reported in RUN-EU PLUS deliverables prepared by these work packages.

Through planning and implementing the researcher training programme, members of the RUN-EU PLUS project have become more aware of the career possibilities for researchers in both academia and industry. At the same time, the research skills needed in different kinds of work environments have become more apparent. One crosscutting principle in our training is that all RUN-EU researchers will be made aware of the variety of researcher careers in addition to the collaborative research possibilities with industry which exist. RUN-EU PLUS WP6 is in the process of developing a strategy for the innovative collaboration between the RUN-EU University and companies. Through this increasing awareness, RUN-EU researchers will me more equipped to identify an employment role that meets their professional goals and their research programme with the RUN European University will support them while they develop their Personal Career Development Plan.

It is recognised that researchers require training in multiple facets of research activity including critical thinking, disciplinary knowledge and concepts, research methods, research ethics, Intellectual Property Rights Issues, and data analysis methods. Research Engagement and Impact has been added as an additional topic after the first

version in 2022. The complete Researcher Career Development Training Programme including the training themes is summarized in **Figure 1**.

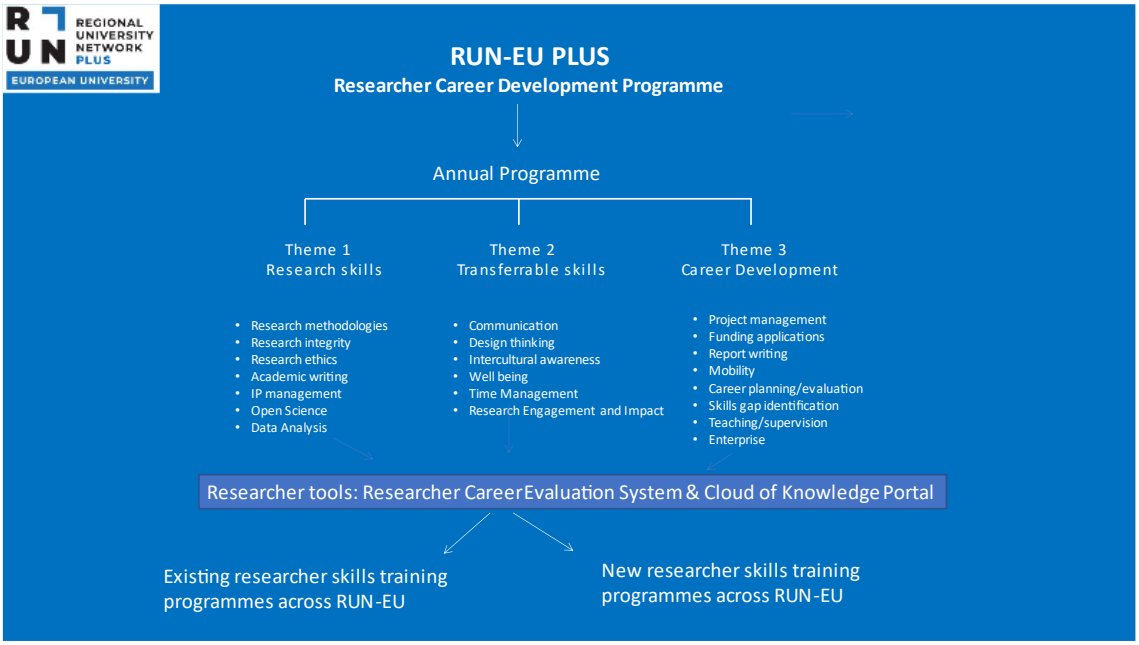

Figure 1 – 2023-2024 Researcher Career Development Training Programme themes

The programme is available to all RUN-EU researchers (postgraduate students, research assistants, postdoctoral fellows as well as academic researchers) and is designed to allow participation at any stage during career development. The programme will be complemented by discipline specific training programmes undertaken by research students as part of their structured masters/doctoral programmes. Each edition of the programme will consist of 3 themes, namely Research Skills (Theme 1), Transferable Skills (Theme 2) and Career Development Skills (Theme 3). The objective of these themes is to introduce the researcher to each topic thereby raising their awareness of the relevance of these skills to their researcher career. The workshops covering Open Science are part of the training resources and are provided under RUN-EU PLUS WP5 and the events are reported in **D5.5 Annual**

report on the Implementation of the Open Science Skills Training Workshop Programmes – 2nd Report.

2.2 Implementation of the RUN-EU PLUS Researcher Career Development Training Programme

In the implementation of the training programme the features of the framework described previously in RUN-EU PLUS **D4.2** have been followed, namely:

- workshops provide research-based knowledge about topics which are particularly relevant to researchers.
- workshops encourage participants to collaborate in multidisciplinary groups.
- participants are encouraged to learn from listening to others and to be constructive in building collaborations.
- workshops function as a forum to learn the identification of specific features of an academic and non-academic working context.
- Participants are encouraged to identify their learning needs in addition to their 'unlearning' needs (i.e. forgetting the usual way of doing something) regarding their established views and understanding of research career paths.
- workshop activities encourage and support creative thinking and continuous learning, not just regarding work-related tasks but also in well-being and establishing a balance between their working and personal life.
- workshop organisers and facilitators will gain important experience in improving the content and delivery practices of the multidisciplinary workshops.

As the RUN-EU PLUS Researcher Training Programme is aiming to support researchers in their researcher career development, the following framework has been applied to the planning and implementation of training activities (also included in **D4.2**):

- participants can plan their career paths in a more systematic way.
- participant knowledge of mobility opportunities and opportunities for cooperation (both educational and research-based) is increased.

- participants improve their skills to plan community-based and practice-based research practices in the RUN European University context.
- participants are afforded tools to view and build research-based practices which focus on regional needs and provide researcher career development opportunities in varying contexts.
- equal research career opportunities are developed and supported.
- the practices of open science and citizen science become familiar to the researcher.

Participants are requested to register for each training activity potential. All data provided during registration or in feedback surveys is analysed according to the data protection rules. Also, a Data Protection Impact Assessment (DPIA) is carried out in accordance with RUN-EU PLUS **D1.1 Protection of Personal Data** for this purpose. Experienced key speakers, educators and researchers on the specific workshop theme(s) deliver each training event. Smaller group discussions take place in breakout rooms with facilitators nominated from among the experienced RUN-EU researchers. The event planning groups including representatives from at least two RUN-EU universities define distinctive relevant topics and the pedagogical means and goals of the workshop.

Feedback provided by participants has been collected systematically, mainly using MS Forms (**Annex 1**). The feedback provided has been and will continue to be a valuable resource for future training development. The feedback forms cover a broad range of questions on delivery of the training event and upon review, the recommendations are implemented during the development of subsequent training events. Training participants are encouraged to communicate their feedback orally in workshop discussions and before the training event closure, which is regarded as good practice. Feedback is welcomed up to about two weeks after the event to allow participants to reflect on their experience if they wish.

Figure 2 presents the training calendar which has been implemented by the RUN-EU PLUS project since project start in October 2021.

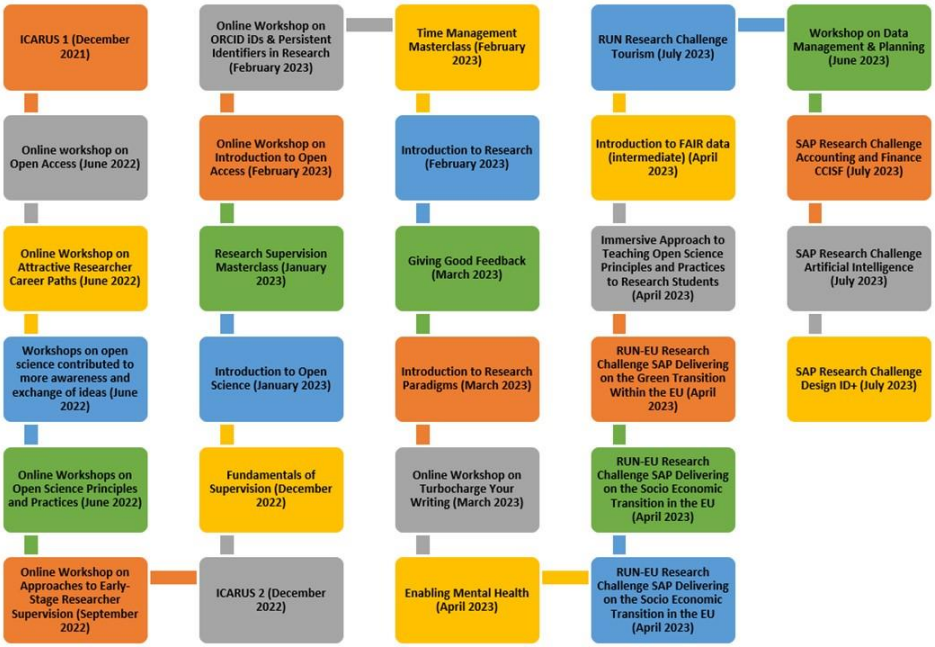

Figure 2 - Calendar of RUN-EU PLUS researcher training events 2021-2023

The training calendar shows that 28 workshops have been organised by the RUN-EU PLUS project including online events, courses, and face-to-face intensive days, 20 of which were organised after the first RUN-EU PLUS year, between October 2022 and September 2023. Altogether a total of 406 attendees have registered and participated in these events. This number includes repeat attendees of different training events. The training calendar also shows that the number of training events delivered to researchers in the last academic year has intensified.

Table 1 shows the list of training events and the co-ordinating RUN-EU partner institution. **Annex 2** provides a detailed account of the trainers along with the topics covered in each event.

Table 1 – Researcher Career Development Programme training events for RUN-EU researchers in Year 1 and Year 2 of RUN-EU PLUS

No.	Training Workshops	Co-ordinating RUN-EU Partner
1	ICARUS 1 (Dec 2021)	SZE, Hungary
2	Online Workshop on Open Access (June 2022)	NHL Stenden, The Netherlands
3	Online Workshop on Researcher Career Paths (June 2022)	HAMK
4	Workshop on Data Management and FAIR Data (June 2022)	NHL Stenden, The Netherlands
5	Workshop on Open Access Open Science Principles & Practices (Feb 2023)	NHL Stenden, The Netherlands
6	Approached to early-stage Supervision (Sept 2022)	TUS, Ireland
7	ICARUS 2 (December 2022)	TUS, Ireland
8	Fundamentals of Supervision (December 2022)	TUS, Ireland
9	Introduction to Open Science (January 2023)	NHL Stenden, The Netherlands
10	Research Supervision Masterclass (January 2023)	TUS, Ireland
11	ORCID IDs & Persistent Identifiers (Feb 2023)	TUS, Ireland & IPCA, Portugal
12	Time Management Masterclass (Feb 2023)	TUS, Ireland
13	Introduction to Research (Feb 2023)	TUS, Ireland
14	Giving Good Feedback (March 2023)	TUS, Ireland
15	Introduction to Research Paradigms (March 2023)	TUS, Ireland
16	Turbocharge your Writing (March 2023)	TUS, Ireland
17	Enabling Mental Health: what supervisors can do (April 2023)	TUS, Ireland
18	RUN-EU Research Challenge SAP (April 2023)	SZE, Hungary
19	RUN-EU Research Challenge SAP Socio-Economic Transition in the EU (April 2023)	SZE, Hungary
20	RUN-EU Research Challenge SAP Green Transition within the EU (April 2023)	SZE, Hungary
21	Teaching Open Science Principles and Practices to Research Students (April 2023)	NHL Stenden, The Netherlands
22	Introduction to FAIR Data (intermediate) (April 2023)	NHL Stenden, The Netherlands
23	RUN Research Challenge Tourism (July 2023)	IPCA, Portugal & TUS, Ireland
24	SAP Research Challenge Accounting and Finance CCISF (July 2023)	IPCA, Portugal & TUS, Ireland

25	SAP Research Challenge Artificial Intelligence (July 2023)	IPCA, Portugal & TUS, Ireland
26	SAR Research Challenge Design ID+ (July 2023)	IPCA, Portugal & TUS, Ireland
27	Workshop on Data Management Planning (June 2023)	NHL Stenden, The Netherlands

Training events are announced using a banner designed especially for the event (an example is provided in **Annex 3**). According to the RUN-EU PLUS Grant Agreement, 3 editions of the researcher career development programme will be implemented annually. By the end of September 2022 two workshops addressing Open Science topics under RUN-EU PLUS WP5, and 3 workshops focusing on the researcher career path and supervision under RUN-EU PLUS WP4 had been delivered to RUN-EU researchers. The training provided cover several researcher transferable skills. Skills training for researcher students (master's and doctoral researchers) may be voluntary or mandatory. Researcher supervision training for academic supervisors of master's and PhD students is the only training in RUN-EU PLUS which is defined as mandatory (WP6). Otherwise RUN-EU researchers have chosen to undertake the training provided by RUN-EU PLUS project due to their own interests and other criteria.

2.3 Digital Badge certification

Early-stage RUN-EU researchers enrolled in master's or doctoral studies obtain recognition for core researcher skills in the form of ECTS embedded in their research degree programme. Currently, workshop participants, including presenters, are awarded a certificate of attendance in recognition of their participation (**Annex 4** and **Annex 5**). However, postdoctoral fellows and senior researchers have also a requirement to present the progression of their researcher skills in their CV. For this purpose, Digital Badges are considered a valuable and appropriate certification system by the RUN-EU PLUS Project Management Committee. A Digital Badge, as a method of assessment and recognition of achievement of learning outcomes, has roots in the

context of informal learning and but the practice has been developed for formal higher education context as well. By badges, or digital badges, educational providers can capture and communicate learner accomplishment.

The European Commission has been developing the European Digital Credentials Infrastructure (EDCI) to support efficiency and security in how credentials such as qualifications and other learning achievements can be recognised across Europe. In 2016, the EPALE Electronic Platform for Adult Learning in Europe published a webinar on 'What is Open Badges and how do I get started?' Since then the processes for their use have been discussed broadly on both an EU (e.g.,) and national levels (e.g. in Finland .

In recent years digital badges have become increasingly popular in higher education because they offer numerous benefits for both the students and institutions. With the support of the AIchat (Artificial Intelligent chat), RUN-EU PLUS discussions have identified the following benefits for the use and practices of digital badges in our researcher training. These benefits are listed in **Table 2**.

Table 2 - Identified purposes and benefits of digital badges in RUN-EU PLUS researcher training

1. Recognition and validation: Digital badges recognize and validate a person's skills, knowledge, and accomplishments, providing a tangible and portable way to showcase their achievements in the research field to their potential research collaborators, employers, and other peers.
2. Motivation: Digital badges can motivate researchers from all researcher career stages to engage in activities that they might not have pursued otherwise. The recognition and validation provided by badges can encourage researchers to strive for excellence and push themselves to achieve their full potential, also in updating their competencies.
3. Flexibility: Digital badges can be designed to match the unique needs of specific skills. In RUN-EU PLUS we have created badges that align with RUN-EU objectives and goals, and RUN-EU researchers can tailor their badge collections to reflect their areas of interest and expertise.
4. Curriculum enhancement: Digital badges have already been used in RUN-EU PLUS and will be used in future to augment traditional academic programs by providing opportunities for the RUN-EU researchers to engage in interdisciplinary, experiential,

or self-directed learning. The use of badges in RUN-EU aims to promote collaboration and teamwork among researchers, fostering a more dynamic and engaging learning environment.

5. Competitive advantage: Employers are increasingly interested in hiring candidates who have demonstrated specific skills and abilities, and digital badges make it easier for them to identify and evaluate the qualifications of potential hires. As RUN-EU PLUS activities operate closely with industry and companies, digital badges provide a good starting point to discuss relevant researcher skills outside the university.

Overall, it is recognised by the RUN-EU PLUS project members that digital badges provide a versatile and innovative approach to recognizing and validating researcher achievements, promoting engagement and motivation, and enhancing the overall quality of higher education research.

A skills badge such as a digital badge must be accompanied by a description which indicates the kind of competence the holder of the badge has, in addition to information on who has issued the badge and who has assessed the holder's competence (https://tem.fi/en/skills-badges). TUS and HAMK are the RUN-EU universities that currently implement the digital badge certification system and each of these universities has their own assessment system and process rules which they apply. Currently, no one shared system for this purpose is shared across the RUN-EU alliance. The issuer of a badge must be a legal entity. It was agreed by the RUN-EU PLUS Project Management Committee that TUS will provide certification for appropriate RUN-EU PLUS training programmes in accordance with the TUS current digital badge assessment system. To date, 5 RUN-EU PLUS training programmes have been awarded digital badge certification. These are listed in **Figure 3**.

RUN-EU PLUS programmes with Digital Badge certification	Sample Digital Badge
• Open Science • Research Engagement & Impact • Grant Writing • Supervisor Training • Research Paradigms	

Figure 3 - List of RUN-EU PLUS training programmes with Digital Badge certification

2.4 Researcher SAP challenges

In today's fast-paced world, addressing persistent social, economic, and environmental challenges requires a dynamic and adaptive approach to education. The Regional University Network European University (RUN-EU) provides its students with the opportunity to take part in Short Advanced Programs (SAPs). Spanning one to eight weeks, SAPs have emerged as a powerful tool to empower students of RUN partner institutions with the skills and knowledge needed to develop innovative solutions to such challenges. These unique programmes bring together teams of students from across the RUN-EU alliance and through a combination of on-campus activities with carefully designed online sessions, foster a rich and immersive learning experience that transcends geographical barriers and empowers participants to become agents of change. These SAPs are designed to ignite a student's intellectual curiosity and drive their research endeavours to new heights that push the boundaries of their understanding.

SAP Research Challenges are specifically targeted to RUN-EU postgraduate students and researchers and are developed and delivered through collaboration between RUN-EU (Erasmus+) WP3 (SAPs), WP5 (Discovery Research Programme) and the RUN-EU

PLUS project. Traditional research education, while essential, may not always cater to the urgency of addressing real-time issues. SAP Research Challenges fill this gap by offering specialized and intensive curricula focused on specific research challenges, cutting-edge technologies, or emerging fields. Participants (researchers) are provided with an opportunity to delve deeply into relevant topics and build knowledge that can be directly applied in practical settings. In July 2023, four SAP Research Challenges were held at the Polytechnic Institute of Cávado and Ave, Barcelos, Portugal. **Figure 4** shows examples of Research Challenge SAPs developed collaboratively by RUN-EU WP3 (SAPs), WP5 (Discovery Research Programme) and the RUN-EU PLUS project for the research community of the RUN European University.

Figure 4 - Research Challenge SAPs

In addition to masterclasses in their own discipline area, inter-disciplinary teams were created comprised of researchers from all 4 areas. Teams were set a specific research challenge and worked in their interdisciplinary groups for the week, guided by senior researchers and academics, and presented their approach to addressing the challenge at the end of the SAP week to an audience comprising of other SAP colleagues, senior researchers, and academic staff.

A brief description of each along with the skills learned by each SAP cohort are summarized below for better understanding:

1. **Artificial Intelligence (AI):** This SAP has enabled researchers to delve into the intricate realms of machine learning, data analysis, and neural networks. Equipped with these skills, researchers are now well-versed in harnessing data-driven insights to make informed decisions. As AI continues to reshape industries, participants of this SAP will contribute to Ireland and the EU by pioneering innovative solutions that enhance efficiency across sectors like healthcare, agriculture, and manufacturing. Their ability to develop AI-driven products and services will bolster economic growth and position Europe as a global AI hub.
2. **Tourism Management:** The Tourism SAP has deeply taught researchers about travel trends, customer behaviour, and sustainable tourism practices. Armed with this knowledge, participants are poised to lead the way in creating immersive travel experiences that cater to modern traveller preferences while minimizing environmental impact. In an EU context, their expertise will help drive responsible and authentic tourism, ensuring the preservation of cultural heritage and boosting local economies through increased tourist engagement.
3. **Accounting & Finance:** This SAP has equipped researchers with a comprehensive grasp of financial analysis, risk management, and strategic financial planning. Participants now possess the skills to navigate the complexities of global markets and contribute to sound fiscal decision-making. As Ireland and the EU continue to solidify their economic ties, these researchers will play a pivotal role in ensuring transparency and compliance in financial operations, thereby reinforcing investor confidence, and facilitating cross-border trade.
4. **Design ID+:** The Design ID+ SAP has nurtured researchers' creative prowess and honed their design thinking skills, enabling them to conceptualize and execute innovative design solutions. Armed with this capability, participants are well-

prepared to address challenges across various industries, ranging from product design to user experience. By crafting user-centric and aesthetically appealing solutions, these individuals will enhance the competitiveness of Irish and EU businesses on the global stage, fostering growth and sustainability.

SAPs are innovative education programs which instil in RUN-EU students the future skills and competencies required to address the needs of regional business and organisations:

- **Blended On-Campus and Online Learning:**

The fusion of on-campus activities with online sessions brings the best of both worlds to learners. On-campus interactions facilitate peer-to-peer networking, hands-on workshops, and face-to-face mentoring, fostering a sense of community and collaboration. Simultaneously, online components enable flexibility and accessibility, allowing participants from diverse backgrounds to join the program without the constraints of time and location.

- **Emphasis on Practical Application:**

One of the primary strengths of these programs lies in their emphasis on hands-on learning and real-world application. Instructors with expertise in the field guide participants through simulations and projects, enabling them to apply theoretical concepts to tangible challenges. This practical approach not only strengthens problem-solving skills but also nurtures the spirit of innovation and entrepreneurship.

- **Addressing Current Social, Economic, and Environmental Issues:**

The relevance of SAPs extends far beyond traditional academia. These programs are tailored to tackle pressing social, economic, and environmental issues of the present time. Participants delve into areas such as sustainable development, renewable energy, social entrepreneurship, public health, artificial intelligence for social good,

and more. By focusing on these pertinent matters, these programs empower participants to contribute meaningfully to society and drive positive change.

- **Creating a Global Community of Changemakers:**

SAPs attract a diverse pool of researchers from different countries, cultures, and professional backgrounds across the EU. This diversity enriches the learning experience and fosters a global community of like-minded changemakers. Collaborating with peers from different walks of life exposes participants to a wide range of perspectives and encourages cross-cultural understanding, crucial for addressing global challenges collectively.

- **Driving Innovation and Leadership:**

As participants become equipped with specialized knowledge and practical skills, they also develop the confidence to become innovators and leaders in their respective fields. SAPs nurture critical thinking, problem-solving, and communication abilities, creating a generation of proactive individuals capable of driving transformative change.

In conclusion, SAPs that combine on-campus activities with online sessions offer a dynamic and powerful platform for addressing current social, economic, and environmental issues. These programs cater to the urgency of real-time challenges, providing participants with practical skills and knowledge that can be applied directly to make a positive impact. As more individuals embrace these opportunities, we can expect to see a collective effort in finding innovative solutions and creating a brighter future for all. Moreover, in an era that is defined by rapid technological advancements and evolving industry landscapes, the acquisition of specialized skills has become more critical than ever. These SAPs on Artificial Intelligence (AI), Tourism Management, Accounting and Finance, and Design ID+ have emerged as crucial conduits for equipping researchers with the expertise needed to excel in their respective fields. Beyond individual growth, these acquired proficiencies are poised to catalyse benefits for Ireland and the broader European Union (EU). Their newfound competencies align

with the evolving needs of these regions, driving innovation, economic growth, and sustainable development. As these researchers embark on their professional journeys, their contributions are poised to shape industries and elevate Europe's standing on the global platform.

3. Pilot Study of the Researcher Career Development Evaluation Tool

3.1 The Pilot Study process

The Research and Career Evaluation System implemented by the RUN-EU PLUS project has been described previously in **D4.6**. In that work, the recommendations described in the EU report Towards a Reform of the Research Assessment (2021) were followed with the aim to develop research skills training and a researcher career evaluation system that are based on intrinsic merits and performance.

The requirements for the Research and Career Evaluation System were defined in the Grant Agreement and based on the RUN-EU PLUS objectives identified within.

The Research and Career Evaluation System will:

- support researcher career development at all researcher career stages.
- support researcher competences, focusing particularly on practice-based research.
- focus particularly on recognising the importance of team performances.
- emphasise the quality of research work.
- include the assessment of teamwork, Open Science practices, and research quality markers.
- support the development of RUN-EU researcher recruitment and collaboration practices.
- support the trainers of RUN-EU researchers to plan and implement their training based on the general objectives of RUN-EU.

- support the assessment and development of the RUN-EU researcher training programme content, practices, and quality.

The benefits of the tool for both the researcher and the organization have been identified and are presented in **Table 3**.

Table 3 – Impact of Researcher Career Development Evaluation Tool

Individual researcher level	Collaborative & organisational level
•supports researcher career development on all researcher career stages from doctoral researchers to senior researchers and academic research staff • supports the identification of their own skills and expertise as a researcher • helps to identify training needs and develop their personal skills training plan for their chosen career path • support competences especially in the features of practice-based research.	• the themes on the tool provide the structure for professional development discussions between academic supervisors/research managers and early-stage researchers • supports collaboration practices, e.g., in the research team • supports the development of RUN-EU researcher recruitment • supports the trainers of RUN-EU researchers to plan and implement their training based on the general objectives of RUN-EU • supports the assessment and development of the RUN-EU Researcher Training Programme content, practices, and the quality • may be used flexibly and modified to fit requirements.

In the implementation of the system, we have so far focused on its possibilities to support researchers in self-assessment of their research and transferable skills. Self-assessment is a process that involves evaluating personal skills, strengths, weaknesses, and areas that require further development. The assessment can be undertaken through self-reflection, feedback from colleagues/mentors, and in RUN-EU PLUS, we have developed an evaluation tool for this purpose. Overall, self-assessment is an essential step in the development of researchers. It helps them recognize their

strengths and weaknesses, set priorities, and develop strategies to enhance their research skills and productivity.

In constructing the evaluation tool, feedback from researchers, HR and from research services was sought, and its relevance with people from the target group was examined before launching it to broader use. The Pilot Study of the Researcher Career Evaluation System was planned by February 2023 and **Figure 5** displays the Pilot Study process and its timeline. Recruitment occurred in February and March 2023 and 107 researchers participated in the Pilot Study, spread across 8 RUN-EU partner universities. An information session was provided in April 2023. Participants were given until the end of May to use the tool and 68 of them completed the feedback questionnaire which was provided in online format.

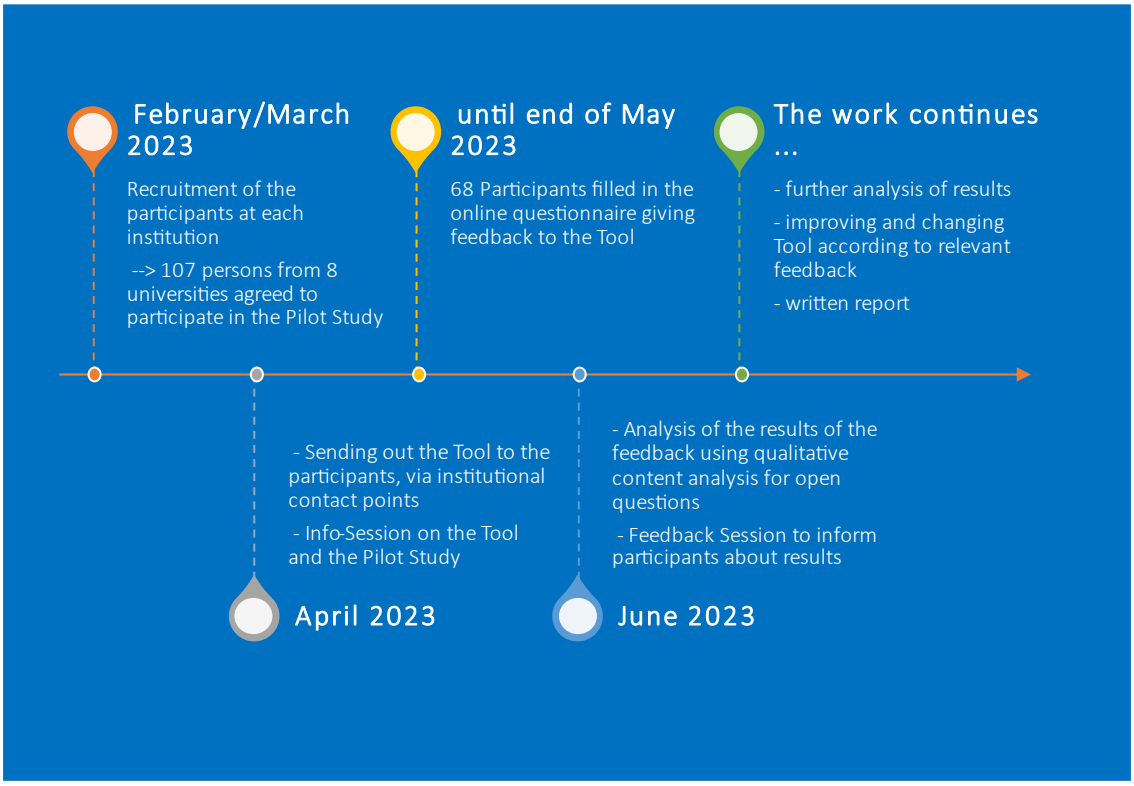

Figure 5 - Pilot Study process

The feedback questionnaire was designed by a small group of RUN-EU PLUS members which included representatives from FHV, HAMK and TUS. The questionnaire included

a short introductory text, followed by questions which provided answers in a qualitative as well as quantitative format concerning the practicality, the structure, the content, the self-assessment quality, and identification of skills of the tool as well as its format. Open feedback was allowed for, and some personal information was also collected, which was treated anonymously.

Upon review and analysis of the feedback provided by the participants, an information session was organised in July which presented the main findings to the participants. These main results are included in this report (**Section 3.2**).

Regarding the methodological approach applied in the quantitative analyses of the data, a descriptive approach was applied along with frequencies and percentages. A qualitative thematic analysis was applied as the framework in the analysis of open questions. In practice the text data was closely examined to identify common themes, topics, ideas, and patterns of meaning that arose and attention was paid to their repetencies. The following steps were applied: 1) familiarisation with the data, 2) generation of themes, 3) review of themes, and 4) identification of the main themes and results.

Section 3.2 presents the Pilot Study participant cohort which is followed by an overview of the key findings in **Section 3.3**. The participant feedback is classified under three thematic areas namely regarding the structure of the tool, the format of the tool, and the content of the tool. Finally, the main conclusions are drawn up and an overview of the next steps are provided.

3.2. Recruitment of the Pilot Study participants

In March 2023, contact points of each RUN-EU PLUS institution were asked in a RUN-EU PLUS WP4 meeting to recruit persons for testing the Researcher Career Development Evaluation Tool. An invitation letter to support this recruitment was provided by the Lead and Co-Lead of this RUN-EU PLUS task. As part of the expansion strategy of our RUN European University, 2 institutions, who will become full partners

in the next RUN-EU cycle, were invited to participate in the pilot study. The University of Burgos, Spain, accepted the invitation to participate.

Each institution was free to choose how to communicate the information regarding the pilot study and whom to recruit. This approach was chosen to preserve the respective autonomy of the institutions and to be able to implement any locally successful approach when it comes to recruitment processes for pilot studies. The recruitment process was therefore different at each institution, ranging from circulation of 'expression of interest' e-mails to all staff and students, to informing about the pilot study on the Intranet, to spreading the information through Research Unit coordinators, to contacting persons who have been involved in RUN-EU PLUS in the past, up to selecting a specific group of researchers from different career stages, research areas, genders and ages (aiming to resemble a realistic cohort of the institution). The recruitment process ended by 31st March 2023, and 107 persons from 8 universities have agreed to participate in the pilot study to test the RUN-EU Researcher Career Development Evaluation Tool. The tool was sent to them via e-mail as an attachment (Word-document) through the institutional contact points in April 2023.

On 19 April 2023, a RUN-EU PLUS info-session to explain core characteristics of the tool and of the Pilot Study was offered. Participation in the info-session was not obligatory, and the session was recorded. Some 50 persons participated in the info-session.

In May 2023, a link and QR-code to a Microsoft Forms questionnaire was sent to the participants, who were provided with the opportunity to complete the questionnaire until the end of May (31st May 2023).

3.3 Pilot Study Feedback

Of the 107 people registered to use the tool, 68 completed the feedback questionnaire. This translates to a response rate of 63.55%. Furthermore, additional responses were received from the RUN-EU PLUS ambassador networks, namely Open

Science, Gender and Diversity and Research & Innovation, who were invited separately to provide feedback. These few individual responses are not yet included in the analyses of this report, but their open question responses will be in the final Pilot Study report in 2024.

Feedback providers where researchers from the following RUN-EU Research clusters:

- Research Area 7: Education and Social Sciences (22 responses)
- Research Area "Other" (12)
- Research Area 8: Health and Wellbeing (8)
- Research Area 2: Food and Biotechnology (8)
- Research Area 5: Smart, Sustainable and Advanced Manufacturing (7)
- Research Area 6: Climate Change – Circular Economy & Decarbonisation (4)
- Research Area 1: Creative Art, Design and Materials Thinking (3)
- Research Area 3: Tourism (1)
- Research Area 4: IOT & Cybersecurity (1).

Most participants were either Doctoral Students (19 responses) or Postdoctoral Researchers (14). In addition, Lecturers (8) and Senior Research Fellows (6) also provided feedback on the tool. Regarding the career stage of the feedback providers, they included 4 master's students, 4 Assistant Professors, 4 Associate Professors and 3 Professors, 2 Research Assistants and 2 Research Managers. Two participants identify their role as 'Other' from the role title options provided.

The affiliation of the Pilot Study participants in RUN-EU universities is the following: Polytechnic of Leiria (18 responses); Technological University of the Shannon: Midlands Midwest (12); University of Burgos (9); Polytechnic of Cávado and Ave – IPCA (8); FHV – Vorarlberg University of Applied Sciences (8); University of Györ Széchenyi Istvan University (5); Häme University of Applied Sciences (5); NHL Stenden University of Applied Sciences (3); Other (0).

3.3.1 Tool Structure

The respondents were asked to rate the structure of the tool. More than 75% of the respondents believed that the structure of the tool was "good" or "very good." Furthermore, 22.1% of the respondents (15 answers) rated the structure of the tool as "acceptable" and 1.5% (1 answer) as "poor." None of the respondents rated the structure of the evaluation tool as "very poor" (see **Figure 6**).

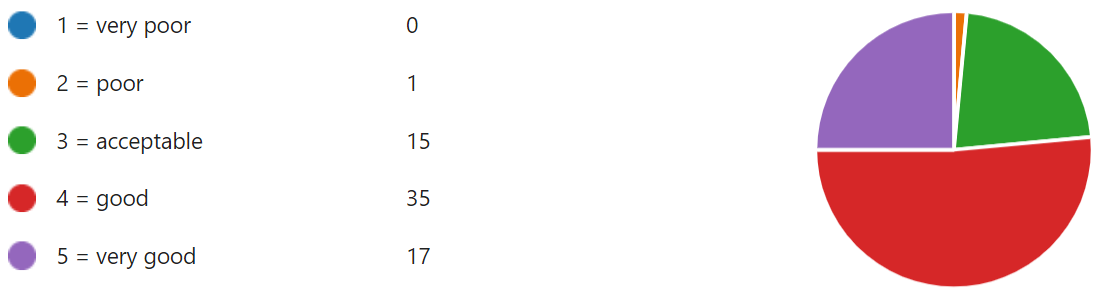

Figure 6 – Rating of evaluation tool structure

When respondents were asked "What did you like and why?", many respondents stated that they liked the different sections of the tool, including the topics addressed in the sections, as well as the flow of the questions. Respondents explained that the structure increased the clarity and simplicity of the tool.

The respondents stressed for example that the sections address important research activities, skills, and dimensions of a researcher career. The following quote is indicating the positive experience in using the tool: "*The sections helped me focus on which areas I need to improve more and where I have more experience*".

In open questions there were a few comments about the layout, that "*allows to quickly understand the aspects*". A few respondents pointed out that they liked the *"possibility to rate quantitatively"* or that the grading helped to *"establish priorities."*

In the answers concerning the structure there were some suggestions for the improvement of the tool, such as adding a column "*where I could mark which I think I should consider first, which is the most important?".* It was stated as well that the questions are "*very relatable*" and that the structure included multiple perspectives to skills.

On the open question "What did you not like? Why?", 37 out of 68 people submitted an answer. For instance, they pointed out that the tool was "*too long*" (2) with "*too many questions*" or a lot of text had to be read in terms of the relevant researcher skills, which made it "*therefore difficult to absorb quickly*" (6 answers). In addition, a few respondents pointed out that they would like to add or change topics covered in the tool which are relevant for a researcher career in their view (8 answers). Furthermore, a small number of questions might not be easy to understand and/or answer for all participants (4 answers).

It was also noted that the Likert scale/rating system of the tool was not consistent, while sometimes using the range 1 to 4, and in other cases 1 to 5. The 2 persons who mentioned this criticism were strongly in favour of using a rating system from 1 to 5 throughout the tool. Two participants pointed out that they did not like that it was not specified in the material "*whether the participant will have any feedback from the survey"* or that they thought that *"in the end, there would be a visualisation/response integration with advice/directions on what could be the next steps in our career development.*"

Some respondents did not like the format or layout of the tool, explaining that the format is "*not user-friendly*", "*clunky*" or lacks "*visual appeal.*"

In addition, the standardization of the tool was criticised by a few respondents (4 answers), mentioning that "*the standardized forms of the answers may not give the right pictures*" or represent one's reality. Another person explained that "*the whole tool might insinuate that researchers need to excel in all of these areas. It might be suitable to emphasize that you should always play to your strengths and can have a very individual profile based on these qualities.*"

The participants were asked also to provide specific suggestions on how to improve the structure of the tool. Thirty eight out of 68 people submitted an answer to this question. Most of the specific suggestions to improve the structure of the tool concern the categories/sections as well as the format/layout and/or user-friendliness of the tool. Besides, participants of the study suggested to reduce the size of the tool (2 answers), and to increase the individualisation of the tool depending on the personal situation. Five participants pointed out that they would not change the structure of the tool or that they think it is "*good and clear.*"

Regarding the categories/sections, it was suggested to merge the sections "Career Planning" and "Career Management" (2 answers), as they are closely related. Suggestions were also made as to which topics should still be integrated into the tool. These include questions for specific discipline areas (such as arts/creative industries), such as "Are you aware of organisations, cultural groups etc. that you could approach when exploring internships, voluntary work, collaborations and employment opportunities?", but also questions about workplace platforms outside academia in **Section A** of the questionnaire as well as questions about types of publications, and what to do with the results. In addition, it was stressed that the tool should put its focus a bit more on research and promoting research itself (1 answer), and that there should be "a more concrete indication of what 'Training or other activities that improve these skills' and where we can find them or how we can develop them" (1 answer).

Some participants of the study suggested the combination of the description and the comments, one person even pointed out that "*the comments were more helpful than the questions themselves.*" Furthermore, it was suggested to mix answer categories, including open questions or optional answers as well as not just asking about expertise but also questions which you could answer with "completely disagree" or "disagree."

Various respondents indicated that the format or layout of the tool should be improved (9 answers). It was explained that a "*cleaner online version would be easier to complete*" or that the "*word version is not attractive.*" Respondents suggested to

include graphical elements, hyperlinks or macros and interactivity in the format, and to visualise the results of the tool ("*overlook of various dimensions covered*"; "*incorporate the results into a spider diagram*" to give "*a pictorial view of gaps in specific areas*"). Some respondents suggested to combine the visualisation of the results with making recommendations "*on what could be the next steps in our career development*."
When it comes to the individualisation of the tool, some respondents suggested to include open questions or optional answers, a column where the person who fills in the tool can mark what it most important to them, or to make an adaptation of the tool according of the main activity developed by the person possible.
One respondent also pointed out that it should be clear to the researchers and the supervisors that the tool is "an aid" rather than showing causal relationships or ending up *"just adding up points and deriving an automated system."*

3.3.2 Tool Format

Sixty out of 68 people submitted an answer to the question "What format would you like the tool in the future?". Most of the respondents would prefer an online version of the tool in the future (42 answers). In addition to the general responses that an online version was preferred, some respondents also answered that they preferred an app (mobile or web app) or a "*software interface that is more interactive.*" User-friendliness, ease of use, interactivity and sustainability were given as reasons for preferring the online version. Some respondents made specific suggestions for online questionnaire formats, such as using Qualtrics, a website in "survey monkey style", Microsoft Forms, or WebRoll. Only a few respondents were in favour of the existing Microsoft Word format (3 answers), a PDF format (2 answers) or a hard copy version (1 answer).
Besides requesting greater interactivity of the tool, visualisation of the results after having completed the questionnaire as well as the possibility to measure progress was also sought. Two respondents for instance asked whether it would be possible to connect answers in the tool with recommendations, e.g., with information or a link on

how a specific skill could be improved. Others would also like to see a score, graphs or an "instant evaluation" after having finalised the self-assessment. In addition, some respondents would find it helpful to be able to retrieve their answers/results even after having completed the questionnaire, and to be able to compare them to the answers that they would give, for example, 1 year later.

3.3.3 Tool Content

Regarding the content in feedback there was first the question 'How would you rate the content of the Tool?'. **Figure 7** shows that the tool users were mainly very satisfied (88% 'good or very good') with the current content. Respondents confirmed that the open questions featured in the tool cover the main relevant researcher skills and areas. A number of comments highlighted that use of the tool raises researcher awareness of important researcher skills which may not have been considered previously by the researcher. Additionally, feedback comments indicate that some improvement is required to the introductory text to provide greater clarity highlighting how use of the tool, especially by early-stage researchers, will benefit their research career planning as well as support their collaboration with other researchers.

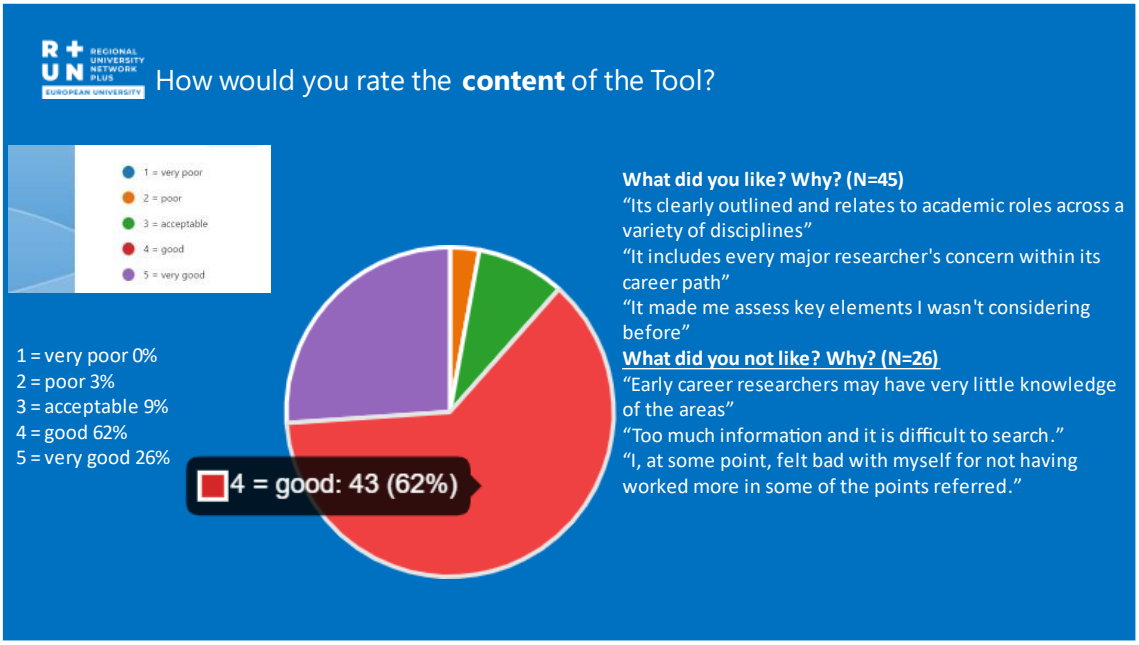

Figure 7 – Feedback regarding content of the Research Career Evaluation Tool

Responses received to additional questions in the feedback survey (displayed in **Figure 8**) once again confirm that the tool is an effective way to raise self-awareness of research skills amongst the target group.

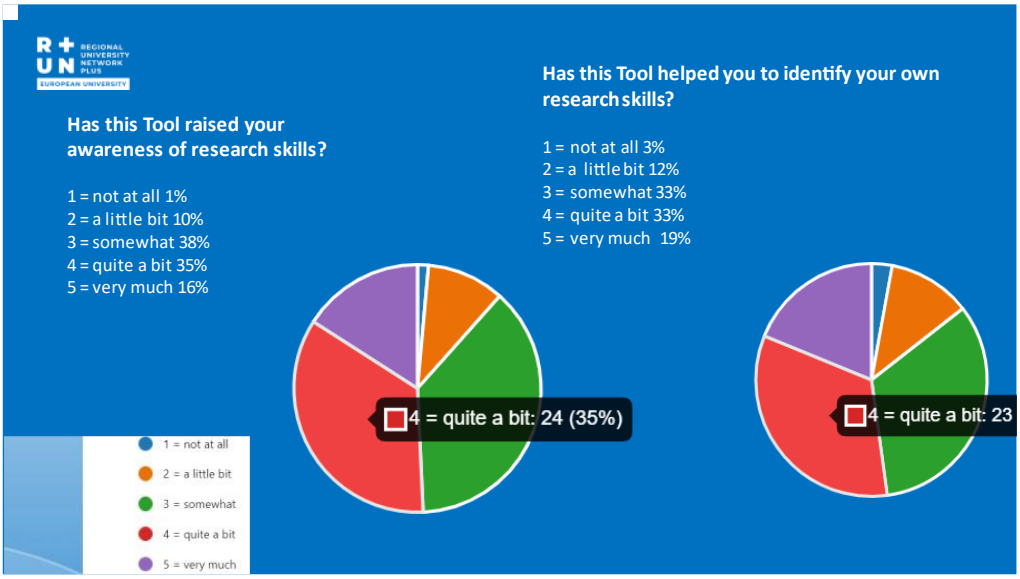

Figure 8 – Effectiveness of Research Career Evaluation Tool at raising awareness of research skills

Suggestions received for new topics for training workshops included *budgeting, project management, legal aspects of the research, the knowledge level of own university context regarding the researcher career development, data analyses and teaching skills (medium/advanced level).* In general, when respondents were asked "Has using the Tool helped you identify skills which you can improve?" almost all (87%) answered "Yes." However, when asked "Has the Tool covered all the competences and skills required for your planned career?" a lower response of 64% "Yes" was received. Additionally, when this response is considered in conjunction with the question that explicitly raises the theme career planning namely "Has this Tool helped you to identify your next career stages?", 20% thought "not at all", 19% considered "a little bit", 46% "somewhat", 13% "quite a bit" and only 1% responded "very much". These answers confirm that more thought is required regarding how or if the tool by itself can clarify different researcher career possibilities for the users, or whether it would be useful to add some supplementary links to the tool as additional reference material which would support this.

When tailoring the tool to researcher career development needs, it was also envisaged that the researchers may wish to discuss the results of the skills self-assessment with their supervision team or manager. In the Pilot Study, only a few (N=3) of the participants have discussed the results of the tool with their supervisor/manager, 48% of the respondents replied that they are planning to do this in the future. Regarding the possible continuity of using the tool, ("Do you plan to use the Tool on a regular basis in the future?"), 51% of the respondents answered 'likely' or 'very likely.'

3.4 Conclusions and Next Steps

The findings of the Pilot Study were very informative. All the details revealed in the answers to the questionnaire are very helpful for the continuing work of further developing the tool, and, in a broader context, concerning research and researcher assessment.

Table 4 presents quotes which summarise significant themes for future development work, including how a research career within academia and a research career outside academia is presented in the tool, how the use of tool is presented in terms of its validity and also related to the ongoing changes in working life regarding researcher work options and possibilities to one's own working environment regarding research activity.

Table 4 – Themes for Future Development

Quotes from the Pilot Study feedback indicating some significant themes for future reflection:
"*Very comprehensive tool not only **for data storing**, but also for realizing research questions in the field of **researcher career development**. The **practice-academia dilemma** is very well represented in the tool. The forms of the answers are too **standardized**. It can have effect on the answers and on the reliability of the Tool."* *"I am working as **a university teacher** and **my researcher career** is somewhere on the first and second place. Thus, I think for me it was a bit tricky to answer the first part of the survey, about the planning to stay in this field - because my answer is absolutely YES! However, filling in the other parts of the survey, I realized that I am a researcher as well, and actually doing quite well in this field as well - so this part made me believe more that I am on the right track. I think this was for the me the biggest surprise of this tool."* *"I have some concerns that our realities are perhaps too diverse to arrive at a truly helpful instrument. And, in my opinion that is fine as long as this instrument is ONLY **for self-assessment** and **never to be used in any sort of career or performance evaluation by the school management**. In that case, however, what I am wondering here is what do I consider crucial when I think about my research, why don't I do more, why should I do more, what benefits do I have, how could the Dean help me do more (is it only funding?), **how to develop a research culture in the department**, and so forth."*

Based on the feedback, these answers will be taken into consideration and WP4 will continue to work on the improvement of the tool. Also, not all themes and sections are relevant for all researcher career stages at one time and this needs to be clarified in the introduction to the tool.

While some feedback was received regarding the length of the tool (indicating that it was too long), the general feedback was very positive regarding how the tool effectively

covers researcher skills, and for this reason it was decided not to shorten it by much as this would sacrifice content. A researcher's continued learning in addition to encouraging research collaboration work will be embedded more explicitly in the tool. One strong wish in the feedback was also to create an electronic form of the tool. This is featured in our RUN-EU PLUS plans and will be included in the development of the Cloud of Knowledge Portal (**Section 4**).

The flexible nature of the tool and the possibility of its application in whichever context will support a researcher's career development, will be highlighted in the introductory text of the tool. While good practice regarding its application will be suggested, no strict rules regarding how to use it will be supplied to our RUN-EU universities. Users of the tool will be encouraged to discuss their results and/or topics raised by the tool with their supervisor, managers, or colleagues in order to collaboratively make plans which will, over time, support and encourage them to develop their researcher skills to a new level or in a new field.

The current version of the tool will be modified according to the feedback received during the Pilot Study and collaborative reflections by WP4 members. The updated version will be disseminated effectively in different RUN-EU PLUS forums and the Pilot Study will continue during 2023. By July 2024, the final results of the Pilot Study will be presented in RUN-EU PLUS **D4.7 Report on the Testing of the RUN-EU PLUS Research and Career Evaluation System**.

4. Cloud of Knowledge Portal

4.1 Portal Development

The RUN-EU PLUS Cloud of Knowledge Portal is designed to support researchers with their skills development and is a source of all training material and therefore a support tool for all researchers. The RUN-EU PLUS Cloud of Knowledge Portal provides researchers with a repository of the delivered RUN-EU PLUS training workshops, presentations, research grants, mobility possibilities and RUN-EU contact points in

different research fields. The Portal will also provide an intersectoral collaborative space and local innovation networking.

A beta version of the Cloud of Knowledge Portal is already accessible at Cloud of Knowledge (ipca.pt). During Year 2 of the RUN-EU PLUS project, efforts have primarily focused on three key objectives:

1) Implementing dynamic features to gather scientific information from all RUN-EU researchers.
2) Integrating a new platform format.
3) Providing user training and incorporating researcher profiles onto the platform.

Some key features of the Portal include:

- **Dynamic features:** To automate the process of updating scientific data on the platform, an investigation into the ORCID Application Programming Interface (API) was conducted. As a result, a collaborative operational model for the platform was established within the consortium. Specifically, this model includes:
    a. All users must have a valid ORCID profile.
    b. All user's ORCID iD are manually inserted into the platform by a user administrator (one in each RUN-EU PLUS partner – see **Figure 9**).
    c. The platform will automatically collect (daily) all information from all the inserted ORCIDs, updating all fields available in the platform (namely user profile, publication per RUN-EU scientific area and scientific projects).
    d. Instead of directly modifying the Cloud of Knowledge Portal, it was also defined that each user has the responsibility to keep their scientific outputs updated directly on the ORCID website (see research profile presented in the knowledge portal – **Figure 10**).

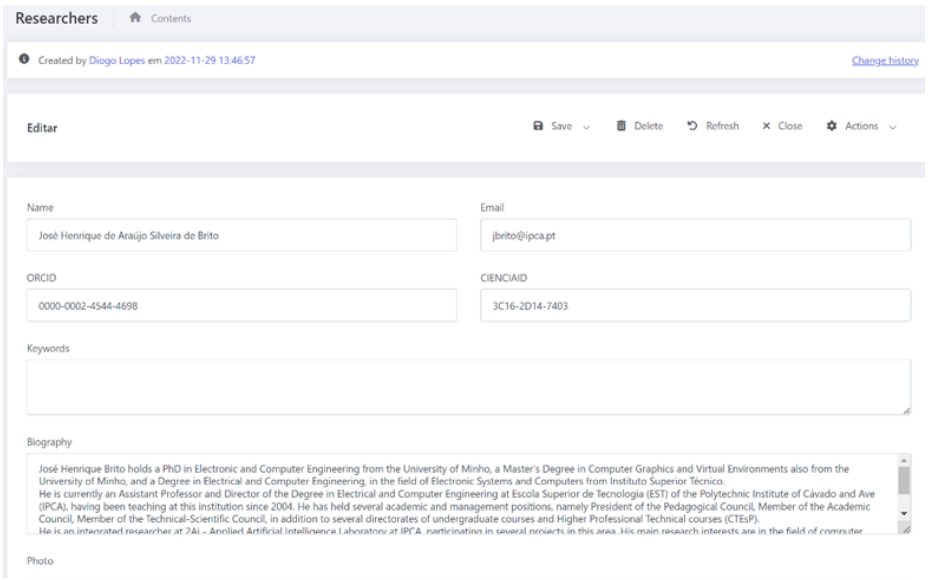

Figure 9 - Backend of researcher profiles on RUN-EU PLUS Cloud of Knowledge Portal

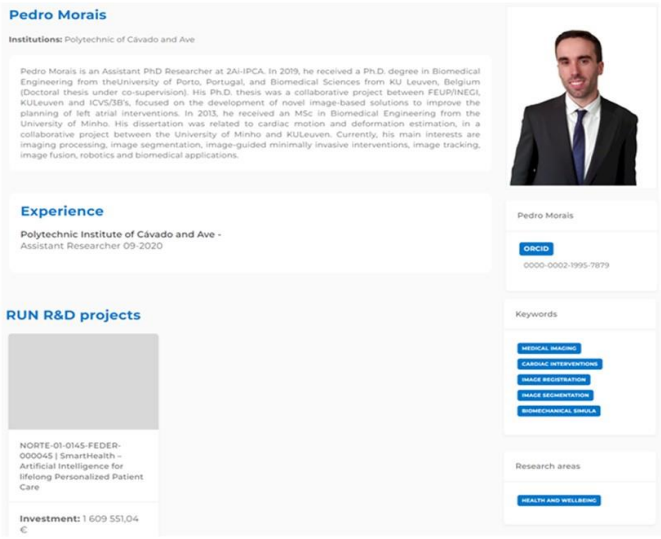

Figure 10 - Partial frontend of researcher profiles on RUN-EU PLUS Cloud of Knowledge Portal

- <u>New Platform Organisation:</u> To maximize the capabilities of this platform, a restructured menu system has been implemented (displayed in **Figure 11**), comprising the following menus:

(i) Research Portal – a search engine that allows, using keywords or RUN-EU research areas, information on RUN-EU PLUS researchers, scientific works, R&D units, and projects.

(ii) Research Support - where the researchers and supervisors can find information pertaining to the RUN EU capacity programme.

(iii) Research Opportunities – where information concerning R&D collaboration opportunities, prizes and information for regional and European project calls will be published.

(iv) Innovation Portal – were information on RUN-EU R&D services, equipment, infrastructures, and Intellectual Property offered by the different R&D units/groups will be presented.

(v) Innovation Support – where the RUN-EU research community can find information regarding intellectual property protection and transfer.

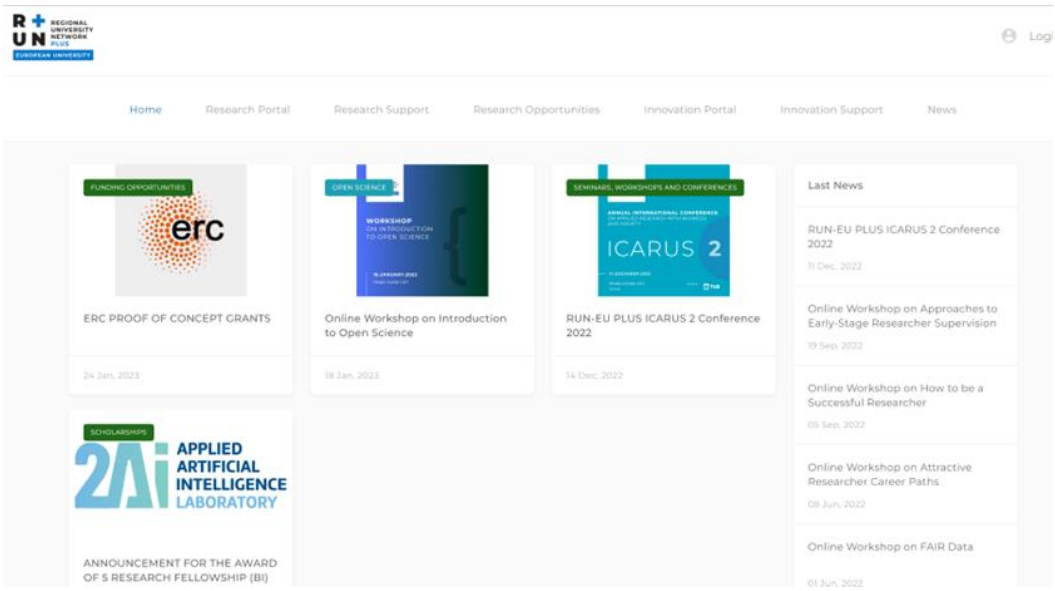

Figure 11 - Organization of Menus on the Cloud of Knowledge Portal

Each of these menus encompasses the following sub-menus:

(i) Research Portal (**Figure 12**)

a. Profiles (with all RUN-EU researchers)
b. Research Units
c. Research Outputs
d. Prizes
e. R&D Projects

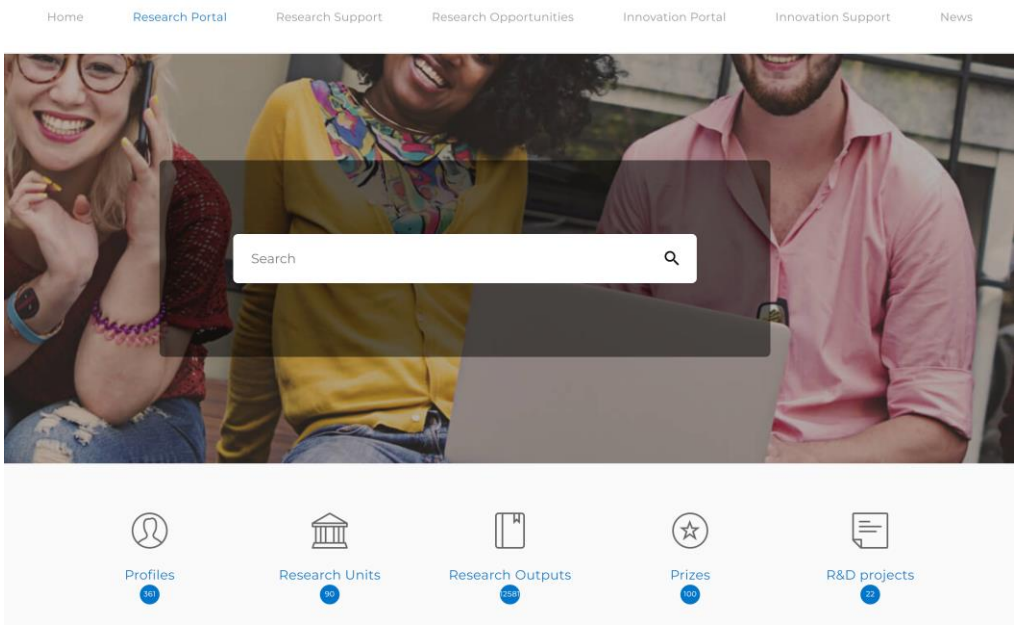

Figure 12 - Submenus available at Research Portal Menu

(ii) Research Support (**Figure 13**)

a. Resilience and independence working
b. Open Science
c. Networking and influencing skills
d. Education
e. Expertise Project Management
f. Strategic Career Development
g. Writing and publishing skills
h. Communication skills
i. Personal development
j. Time Management

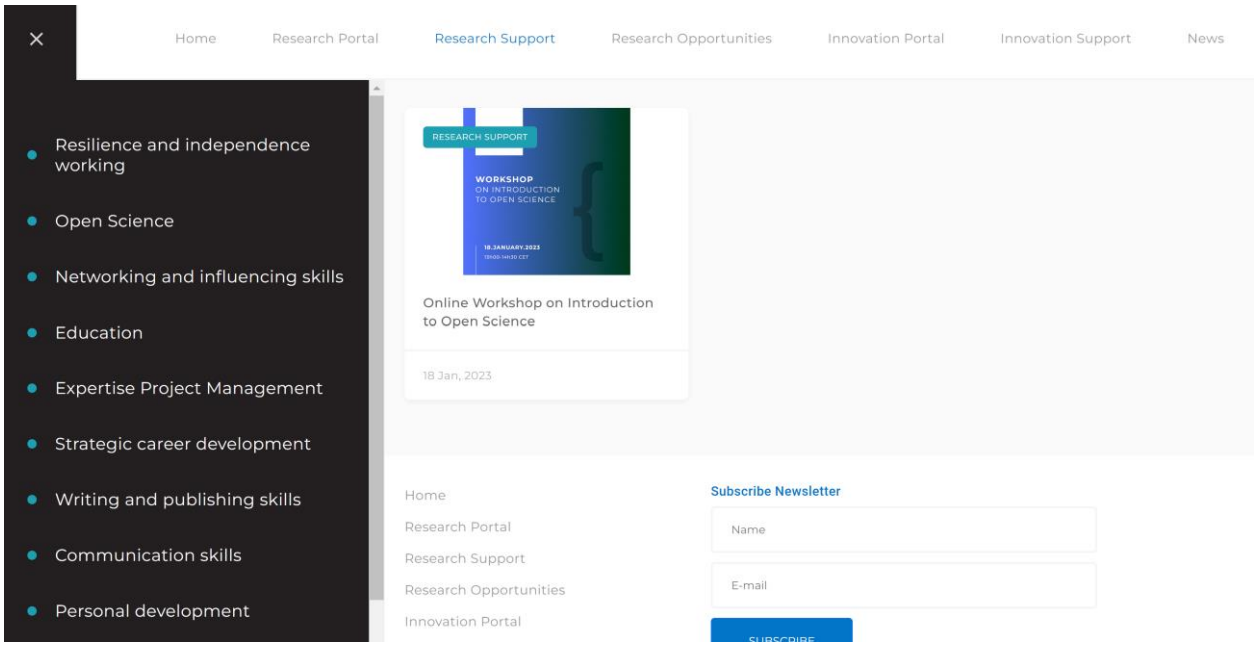

Figure 13 - Submenus available at Research Support Menu

(iii) Research Opportunities (**Figure 14**)

a. Scholarships
b. Funding Opportunities
c. R&D Project Collaboration
d. Seminars, Workshops, and conferences
e. Prizes Opportunities
f. R&D Internships
g. R&D Theses Collaboration

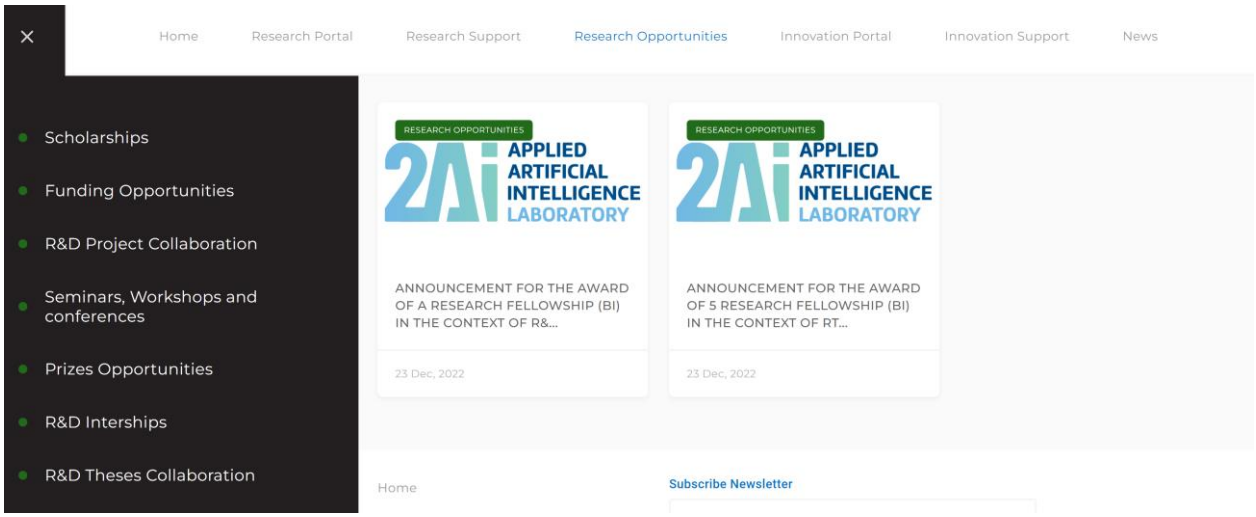

Figure 14 - Submenus available at Research Opportunities Menus

(iv) Innovation Portal (**Figure 15**)

a. Spin-offs
b. R&D infrastructure
c. Technologies
d. Services

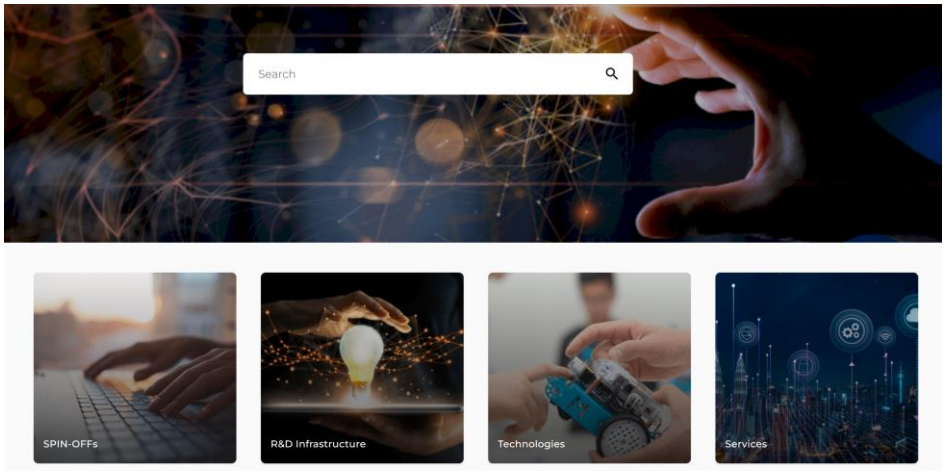

Figure 15 - Submenus available at Innovation Portal Menu

(v) Innovation Support (**Figure 16**)

a. Disclosure Forms
b. Disclose & Protect your Inventions
c. TTO

d. Knowledge Transfer Agreement
e. Legislation/Country

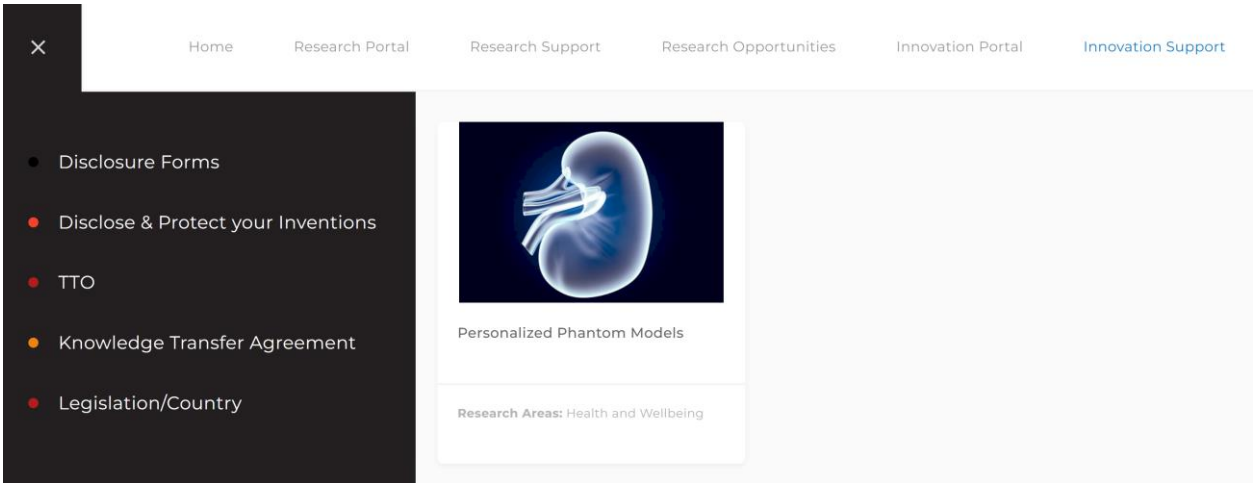

Figure 16 - Submenus available at Innovation Support Menu

- User's Training and data collection: A representative from each RUN-EU partner institution has been designated as a user/administrator. In March 2023, an initial online meeting with the group of representatives to introduce the platform's back-office was held. Following this, each partner institution commenced the important task of gathering and integrating relevant data into the platform. As of now, the platform boasts over 361 user profiles, 90 research units, more than 12,000 publications, over 100 awards, and > 20 R&D projects. All information associated with the RUN-EU PLUS workshop training is being transferred to the Research Support Menu. Throughout this period, modifications have been made continually to the platform based on user feedback. The complete platform has been designed for easy adaptability, enabling the addition or removal of menus and sub-menus as needed. Furthermore, a sophisticated search engine has been integrated to streamline navigation throughout the platform.

The following steps are imminent which will enable the Cloud of Knowledge Portal to be launched as live:

1) to upload as many as possible RUN-EU researcher research profiles onto the Portal.

2) establish an IT group that brings together IT specialists from each RUN-EU partner university.

3) after the Portal functions and conditions are checked by the IT specialist group, it will be launched.

The launch date is planned for the end of September.

5. RUN-EU PLUS Gender and Diversity Ambassador Network

A network of Gender and Diversity Ambassadors has been created by the RUN-EU PLUS project by each RUN-EU partner university nominating one ambassador. The Ambassadors meet every second month and they themselves have nominated a Chair for the group. By consistently meeting, the group maintains a collective focus on driving positive change regarding gender and diversity matters across the RUN-EU alliance. The extent to which institutions are engaged in awareness-raising processes focused on both topics and methodology of research with regards to biases, conscious or not, or un-recognised, implicit assumptions regarding gender differences in the entire research process was discussed at a recent meeting.

The activities and goals of the Ambassadors are reported in detail on the FOREU2 project report (**RUN-EU PLUS D7.7 First FOREU2 Report**, 2023). In the report the RUN-EU PLUS project states that "RUN-EU has implemented strategies to strengthen our human capital resources in research and innovation (R&I) across our University network and adopts a gender participatory approach to ensure the equal distribution of resources and power, as well as to ensure the equal possibilities to all the participants and target groups to have and make an impact through the project's objectives and tasks."

The future goal of this project is to engage the Ambassadors even more in RUN-EU events and activities, relevant to the Ambassadors, with the aim to increase sensitivity and awareness of gender and diversity themes in the RUN-EU community.

6. Some reflections on the future of RUN-EU PLUS researcher training

The training possibilities for RUN-EU researchers from all researcher career stages have increased during the year 2022-2023. The number of training events (workshops, courses, SAPs, and other events) have increased, the number of participants has also increased as well as the variety of the training topics. International collaboration is naturally one main feature of the RUN-EU PLUS researcher training offering various learning possibilities for the RUN-EU researchers. The RUN-EU PLUS collaboration between the researchers has already supported researchers to exposure their perspectives and providing possibilities to promote innovative thinking and new ideas. The Cloud of Knowledge Portal is the platform that will make it easier for the RUN-EU researchers to find suitable collaborators in other RUN-EU universities, and also support help to have better access to new and better research resources. Through collaboration, researchers can access new research resources, including sources of funding, research facilities, and equipment. They have this strong European collaboration experience also a valuable resource if they want to advance their research careers on a global perspective as well.

Regarding the practices of organising each training event, it can be confirmed that the RUN-EU PLUS Workshop Training Programme Development Process (**Table 4**) developed in 2022 is still relevant. This process was initially presented in RUN-EU PLUS **D4.1 Researcher Degree Development Programme**.

Table 5 - RUN-EU PLUS Workshop Training Programme Development Process

1. Scope out workshop/training programme aims and objectives and target audience. 2. Undertake a Data Protection Impact Assessment for the workshop in fulfilment of RUN-EU PLUS Deliverable 1.1 Protection of Personal Data.

3. Prepare and agree agenda with RUN-EU PLUS members as appropriate (content and delivery guided by previous feedback from RUN-EU researcher community).
4. Identify appropriate presenters and facilitators.
5. Seek presenter permission to record and disseminate presentation videos.
6. Liaise with RUN-EU communications team to develop workshop promotional material and call for registrations.
7. Host RUN-EU university to set-up registration process and provide details to RUN-EU communication team.
8. Feedback from registration process to inform final workshop agenda, content, and delivery.
9. Participant feedback invited at end of workshop.
10. Certificates or attendance and presentation prepared and circulated.
11. Inform RUN-EU mobility officer of workshop attendees to record virtual mobility activity.
12. Dissemination articles prepared (including testimonials) in collaboration with RUN-EU communication team and WP7 (Dissemination).
13. In collaboration with the partner responsible on the RUN-EU PLUS Cloud of Knowledge Portal all relevant training material will be available to researchers (as appropriate) on the portal.

This process can easily be applied beyond workshops to other kinds of training activities such as courses or face-to-face intensive weeks. Promotional material inviting participant registrations give clear information regarding who the training is designed for, any pre-requisites required (such as knowledge or experience of certain topics at a certain level), and the learning outcomes of the training. Even though WP4 (Human Capital Development), WP5 (Mainstreaming Open Science Practices) and WP6 (RUN-EU Professional Practice-based Research Degree Programmes) of the RUN-EU PLUS

project are responsible for the development and delivery of specific training workshops, programme and workshop development is not segregated by WP, instead the RUN-EU PLUS project has created an Education Programme Board which takes an integrated approach to developing a cohesive Research Career Development Programme and which is comprised of members for each of the above work packages. To finalise this annual WP4 report, a brief comparison is made between the RUN-EU PLUS training topics and the survey of the European Universities Association Council for Doctoral Education (EUA-CDE) published in for European Universities 2021, in which respondents provided information among different themes on insights on doctoral training, profile of postdoctoral researchers and institutional priorities. The survey received 138 valid responses (98 were members of the EUA-CDE) from 28 European countries.

Table 5 presents the training topics identified for the EUA-CDE survey report as relevant for doctoral training. Training topics included in the RUN-EU PLUS training programme are identified in grey.

Table 6 - EUA CDE survey (2022) topics in doctoral education for European Universities

Topics to be considered in doctoral education (EUA-CDE 2022)	
Quality of Supervision	Sustainable Development Goals
Research Ethics and Integrity	Digitalisation
Enabling own doctoral candidates to gain international experience	Science Communication
	Funding of doctoral schools
Funding of doctoral candidates	Collaboration with non-university partners
Collaboration with other universities	
Research Assessment	Co-tutelles/Joint doctorates
Equality and Diversity	Societal Engagement Collaboration with other services (communication, career support, IT services) within the university
Participation in European Framework Programmes	
FAIR Data and Research Data Management	

Attracting doctoral candidates from abroad Open Science Mental Health and Wellbeing Supporting postdoctoral researchers	Green Transformation Entrepreneurship Innovation Ecosystems Citizen Science

Comparison between the themes identified in the EUA-CDE survey and the themes delivered under the RUN-EU PLUS Researcher Career Development Training Programme raises the topic of Citizen Science as a future thematic area for future consideration in the RUN-EU PLUS programme.

In the RUN-EU PLUS Interim Review (June 2023), the external reviewer also raised the topic of Citizen Science. The EUA-CDE survey (2022) shows that when universities (N=134) were asked which topics are a top priority for doctoral education at their institution, the three most important ones identified included the quality of supervision (64%), Research Ethics and Integrity (54%), and the enabling of doctoral candidates to gain international experience (47%). These topics are included in the RUN-EU PLUS Research Career Development Training Programme complimented by transferable skills topics which are well represented in our current RUN-EU PLUS training model.

So far, the RUN-EU PLUS project has provided training specially developed for the researchers working or studying with alliance institutions of the RUN European University. But the vision is to make research skills training available to external research collaborators of RUN-EU who are based in companies and the public sector. This practice of gathering people together from different research environments is the pedagogical intervention into research collaboration that has potential to help reduce mutual stereotypes that have been recognised. The small semi-structured interview study (see Mortier, Bebiroglu, Teelken, van der Weijden, and McAlpine 2022) conducted with 47 doctorate holders (from different disciplines) in the Netherlands focused on the perceptions that doctorate holders and employers have of one

another. The interviews showed that both groups hold some negative stereotypes of one another, for example, ‘doctorate holders were considered to be theory-driven but slow and lacking a more 'hands-on' attitude.’ Interestingly this small study also shows that after some collaboration and getting to know each other more, both parties admitted that their stereotypes did not hold (Mortier, *et al*, 2022) In RUN-EU PLUS training activities, researchers from academia, along with employers and researchers from non-academic organisations, have the possibility to become acquainted with each other which can produce relevant and new research possibilities for both parties. The goal is that an accurate and complete picture is painted of the research skills required for professional roles both inside and outside of academia.

RUN-EU PLUS project members very much share the thought presented in this Dutch research regarding how future doctorates can benefit from this collaboration between academia and non-academic organisations whether they wish to remain in academia or not. The research funding agencies and above all, the challenges faced by the world, send a message that academics are increasingly called to engage with society and conduct research which benefits society. Supervisors and managers involved in delivering the RUN-EU PLUS project encourage RUN-EU researchers to view collaboration with other sectors and communication and management training as essential to their professional development.

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Annex 1: Participant Feedback Questionnaire

Feedback on the RUN-EU PLUS Researcher Career Development Evaluation Tool (Pilot Study)

Dear participant,

Thank you for piloting the RUN-EU PLUS Researcher Career Development Evaluation Tool, which you received in April as an e-mail attachment.

Having used the Tool, we would welcome your feedback on its use in order to develop it further.

We kindly ask you to complete this feedback form by Wednesday, 31 May 2023, at the latest. This will take approximately 15 minutes.
All responses are anonymous.

If you would like to know more about the RUN-EU PLUS project, please contact runeu-plus@lit.ie

Thank you again for participating in this pilot and we look forward to meeting you at future RUN-EU PLUS events.

Kind regards,

RUN-EU PLUS Researcher Career Development Team

* Required

Practicality of the Tool

[How easy was it to use the Tool?]

1. How would you rate the **practicality** of the Tool? *

- ◯ 1 = very poor
- ◯ 2 = poor
- ◯ 3 = acceptable
- ◯ 4 = good
- ◯ 5 = very good

2. How clear were the written instructions on how to use the Tool? *

- ◯ 1 = very poor
- ◯ 2 = poor
- ◯ 3 = acceptable
- ◯ 4 = good
- ◯ 5 = very good

3. What specific suggestions do you have to improve the practicality of the Tool?

Structure of the Tool

[The way in which the sections and questions of the Tool are connected together, arranged and organised]

4. How would you rate the **structure** of the Tool? *

- ◯ 1 = very poor
- ◯ 2 = poor
- ◯ 3 = acceptable
- ◯ 4 = good
- ◯ 5 = very good

5. Please specify: What did you like? Why?

6. What did you not like? Why?

7. What specific suggestions do you have to improve the structure of the Tool?

Content of the Tool

[The information or material contained in the Tool]

8. How would you rate the **content** of the Tool? *

- ◯ 1 = very poor
- ◯ 2 = poor
- ◯ 3 = acceptable
- ◯ 4 = good
- ◯ 5 = very good

9. Please specify: What did you like? Why?

10. What did you not like? Why?

11. What specific suggestions do you have to improve the content of the Tool?

Self-Assessment Quality and Identification of Your Own Skills

[Judging and recognizing your own progress/achievements and skills]

12. Has this Tool raised your awareness of research skills? *

- ◯ 1 = not at all
- ◯ 2 = a little bit
- ◯ 3 = somewhat
- ◯ 4 = quite a bit
- ◯ 5 = very much

13. Has this Tool helped you to identify your own research skills? *

- ◯ 1 = not at all
- ◯ 2 = a little bit
- ◯ 3 = somewhat
- ◯ 4 = quite a bit
- ◯ 5 = very much

14. Has using the Tool helped you identify skills which you can improve? *

- ◯ yes
- ◯ no

15. Has this Tool helped you to identify your next career stages? *

- ◯ 1 = not at all
- ◯ 2 = a little bit
- ◯ 3 = somewhat
- ◯ 4 = quite a bit
- ◯ 5 = very much

16. Has the Tool covered all the competences and skills required for your planned career? *

- ◯ yes
- ◯ no

17. Have you discussed the results of the tool with your supervisor/manager? *

- ◯ yes
- ◯ no, but planning to
- ◯ no

18. Do you plan to use the Tool on a regular basis in the future? *

- ◯ 1 = very unlikely
- ◯ 2 = unlikely
- ◯ 3 = neutral
- ◯ 4 = likely
- ◯ 5 = very likely

Format of the Tool

[e.g. online, printed version, etc.]

19. What format would you like the tool in the future?

Open Feedback

20. Is there anything else you would like to give as feedback?

Background information

21. Please choose your organisation *

- ◯ NHL Stenden University of Applied Sciences - NHL Stenden
- ◯ Technological University of the Shannon: Midlands Midwest - TUS
- ◯ University of Győr Széchenyi Istvan University - SZE
- ◯ Vorarlberg University of Applied Sciences - FHV
- ◯ Polytechnic of Cávado and Ave - IPCA
- ◯ Polytechnic of Leiria - IPL
- ◯ Häme University of Applied Sciences - HAMK
- ◯ University of Burgos - UBU
- ◯ Howest University of Applied Sciences
- ◯ Other

22. What is your current researcher role? *

- ◯ Master student
- ◯ Research assistant
- ◯ Doctoral student
- ◯ Postdoctoral researcher
- ◯ Lecturer
- ◯ Assistant professor
- ◯ Senior Research Fellow
- ◯ Associate Professor
- ◯ Professor
- ◯ Research Support Officer
- ◯ Research Manager
- ◯ Other

23. Please select the field that best corresponds to your research field or research interests. *

- ◯ Research Area 1: Creative Art, Design and Materials Thinking
- ◯ Research Area 2: Food & Biotechnology
- ◯ Research Area 3: Tourism
- ◯ Research Area 4: IOT & Cybersecurity
- ◯ Research Area 5: Smart, Sustainable and Advanced Manufacturing
- ◯ Research Area 6: Climate Change – Circular Economy & Decarbonisation
- ◯ Research Area 7: Education & Social Sciences
- ◯ Research Area 8: Health & Wellbeing
- ◯ Other

Annex 2: List of Topics and Trainers of training events delivered by Researcher Career Development Programme for RUN-EU researchers

ICARUS-1 (December 2021)	
Topic	**Delivered By**
• Conference Opening • RUN-EU / RUN-EU PLUS Overview • Future and Sustainable Industries Case Study • Impact of the Professional Research Programmes in the Companies and Society • Professional Practice-Based Research Case Study • Research & Innovation across RUN-EU • Strengthening Human Capital • Open Science and WP-5 benefits • Open Forum Discussion and Q&A	Petra Szakonyi, (SZE) Siobhan Moane, (TUS) John Cosgrove, (TUS) Krisztina Bárdos, (SZE) Zoltán Dobra, (Head of Series Analysis and Pre-Series Centre at FAW-VW Automotive Co. Ltd. (Associated partner of RUN-EU) Nuno Rodrigues, (IPL) Vivre Kallioniemi-Chambers, (HAMK) Ingrid van Gorkum, (NHL Stenden)

Open Science Principles & Practises (1-2 June 2022)	
Topic	**Delivered By**
• Open Science • What is it? • History • Importance • In every research phase • Copyright and CC licenses • Open Science in the EU • Open Science within RUN-EU • Reuse • Discussion	Ingrid van Gorkum (NHL Stenden) Jellie Visser (NHL Stenden)

Online workshop on Open Access (June 2022)	
Topic	**Delivered by**
The workshop on Open Access (open publishing books and articles) focuses on: • Advantages of open access • Basic principles of open access • How to publish open access • Open access and copyright	Renáta Farkas, (SZE) Diána Anikó Skultet, (SZE) IPL, Portugal SZE, Hungary Renáta Farkas, (SZE) Diána Anikó Skultet, (SZE) Sónia Gonçalves Pereira, (IPL)

Workshop on Fair Data (June 2022)	
Topic	**Delivered by**
The workshop on FAIR Data (about publishing Findable, Accessible, Interoperable and Reusable Data) will focus on: • Basic principles of research integrity • Writing a data management plan • Data protection in research • Findable, Accessible, Interoperable, Reusable Data	HAMK, Finland NHL Stenden, The Netherlands

Online Workshop on Attractive Researcher Career Paths (June 2022)	
Topic	**Delivered By**
• Results of the RUN-EU PLUS self-audit and gap analysis of researcher career paths • Identification of researcher skills and competencies • Educational needs of researchers • Researcher skills and competencies (short presentations) • Discussion on future researcher skills requirements and educational needs of researchers • Feedback and next steps in the RUN-EU PLUS researcher training programme	Mervi Friman (HAMK) Siobhan Moane (TUS) Patrick Murray (TUS) Virve Kallioniemi-Chambers (HAMK) Hanna Lindroos (HAMK) José Carlos Gomes (IPL) Pedro Morais (IPCA) Markus Preißinger (FHV) Chaired session by all members

Workshop on How to be a Successful Researcher	
Topic	**Delivered By**
• Welcome and introductions • Key challenges in publication (presentation) • Guidelines for breakout sessions • Key challenges and how to cope with them in the publication process (pre-assignment as the base for the discussions) • Importance of networking and collaboration in applying research funding (presentation) • Discussion on building collaborative research and project proposal writing • Summaries of Breakout Session 2 and discussion on research collaborations and proposal writing • Feedback and closing message	Siobhan Moane (TUS) Katalin Czakó (SZE) Hanna Lindroos (HAMK) Katalin Czakó Petra Szakonyi (SZE) Petra Szakonyi) Mervi Friman (HAMK)

Approaches to Early-Stage Supervision (July 2022)	
Topic	**Delivered By**
• What is supervision? • Supervision styles • Requirements to be a supervisor • Towards a good supervisory process • Good practices in supervision	Mervi Friman (HAMK) Telle Hailikari (HAMK) Virve Kallioniemi-Chambers (HAMK) Zoltán Baracskai (SZE) Liam Brown (TUS) Sari Miettinen (HAMK) Jason Palframan (TUS) Sara Novais (IPL)

Fundamentals of Supervision (December 2022)	
Topic	**Delivered By**
• Before you start – questions to ask yourself • Finding Students • The Supervisory Team • The Changing Relationship • Meetings • Writing • First Annual Review • Good Feedback • Plan B	Hugh Kearns (Thinkwell) Hosted by TUS

Introduction to Open Science (January 2023)	
Topic	**Delivered By**
• Open Science • What is it? • History • Importance • In every research phase • Copyright and CC licenses • Open Science in the EU • Open Science within RUN-EU • Reuse • Discussion	Ingrid van Gorkum (NHL Stenden) Jellie Visser (NHL Stenden)

Research Supervision Masterclass (January 2023)	
Topic	**Delivered By**
• Life Events • Mental Health • Power Imbalances • Personal Boundaries • Professional Boundaries • The PhD Doldrums • Adapting your supervisory style to the requirements of individual students • Adapting your supervisory style to the different stages of the PhD • Support for first-time supervisors • The care and maintenance of co-supervisors • Support for postdoctoral researchers as trainee supervisors	Hugh Kearns (ThinkWell) Hosted by TUS

Online workshop on Open Access (February 2023)	
Topic	**Delivered by**
The workshop on Introduction to Open Access will focus on: • Széchenyi István University introduction (in short) • A summary of Open Science • What is Open Access? • What is the importance of Open Access? • Open access types • Open Access publishing possibilities • How does SZE support Open Access publishing?	Renáta Farkas, (SZE) Diána Anikó Skultet, (SZE)

• Publications Support Programme at SZE.	

ORCID IDs & Persistent Identifiers (Feb 2023)	
Topic	**Delivered By**
• What is ORCID? • What are the benefits of using an ORCID iD? • How do I create an ORCID iD? • What information should I include in an ORCID profile? • How to link ORCID to awarded grants • How do I link my ORCID iD to other research profiles I use • How to link ORCID to peer review activity • How will the RUN EU Portal use ORCID? • What is the purpose of persistent identifiers in Research? • How are persistent identifiers used?	Tania Marsh (TUS) João Vilaça (IPCA)

Time Management Masterclass (Feb 2023)	
Topic	**Delivered By**
This workshop focused on following topics: • Take control of your time • Prioritise • Stop procrastinating and stay motivated • Avoid distractions • Say NO (and understand why it is so hard to do so) • Balance competing demands • Manage email and paperwork • Work the slightly less hard way • Think more realistically about your research productivity	Hugh Kearns (ThinkWell)

Online Workshop on Giving Good Feedback (March 2023)	
Topic	**Delivered By**
• The benefits of positive feedback • The different types of feedback • Varying your type of feedback depending on the candidate's stage • Formats: hard copy, track changes, audio, face to face • How to provide criticism without crushing the recipient • Turnaround time: How long is too long for response time • A few pages or a whole chapter • When the writing/grammar/expression is bad • When they don't listen to your feedback	Hugh Kearns (Thinkwell) Hosted by TUS

Introduction to Research Paradigms (March 2023)	
Topic	**Delivered By**
• How research design links to theories of knowledge • How the use of different methods links to ontology and epistemology • What kinds of research questions can be answered using different ontological, epistemological and methodological approaches • What is ontology and how is it relevant to the research process? • What is epistemology and how is it relevant to the research process?	Lisa O'Rourke Scott (TUS)

• How do epistemology and ontology relate to research methods and questions?	

Online Workshop on Turbocharge your Writing (March 2023)	
Topics	**Delivered By**
• why it's hard to get started • how we deliberately use distractions to slow down writing • the principles of quick starting • how to deal with destructive internal beliefs • how to set a writing plan and stick to it • how to set achievable goals by writing in a silo • how to greatly increase the number of actual words you produce • how to clarify your thinking, and improve the quality of your work	Hugh Kearns (Thinkwell) Hosted by TUS

Workshop on Introduction to FAIR data (intermediate) – March 2023	
Topics	**Delivered By**
The workshop on Introduction to FAIR data will focus on: • What is FAIR data? • How do I publish FAIR data? • How do I make my data Findable? • How do I make my data Accessible? • How do I make my data Interoperable?	Hugh Kearns (Thinkwell) Hosted by TUS

• How do I make my data Reusable? • How to comply with privacy laws?	

Workshop on An Immersive Approach to Teaching Open Science Principles and Practices to Research Students – April 2023	
Topics	**Delivered By**
• How and where can open science principles and practices be incorporated into a research project? • 'Open science' is a broad term, are some parts more or less important for students to learn about? • Who can/should teach research students about open science? • When is a good time for research students to be introduced to open science? • Where is a good place to begin when introducing open science to research students? • Can there be any negative implications for students to learn about open science? • Can there be any negative implications for students to practice open science? • How can I support research students in learning about open science principles and practices? • Is there a 'best practice' approach to teaching research students about open science? • How can I support my students in learning about open science if I am not confident with this myself? • Open science is often discussed in the context of quantitative research. How does open science relate to 'qualitative researchers'?	Hugh Kearns (Thinkwell) Hosted by TUS

Enabling Mental Health (April 2023)	
Topic	**Delivered By**
• Provides guidance on how best to support students with mental health issues	Hugh Kearns (Thinkwell) Hosted by TUS

Workshop on Data Management Planning (intermediate)	
Topic	**Delivered By**
The workshop focused on: • Definition of data management planning and data management plan • The importance of data management planning • The typical questions answered in a data management plan • An introduction to a data management planning tool DMPTuuli (used in Finland)	HAMK, Finland

ICARUS-2 (December 2022)	
Topic	**Delivered By**
• Conference Opening • Co-Design of a Sustainable Tourism Research Strategy for RUN-EU Regional Social Impact and Innovation • RUN-EU Researcher Mobility • Joint PhD Supervision across the RUN-EU Alliance (Case Studies) • RUN-EU Transfer Pathways to PhD • RUN-EU PLUS Researcher Career Development Programme • Application and Accessibility of Open Science to Business and Society • RUN-EU PLUS Cloud of Knowledge Portal • Open Forum Discussion	Siobhan Moane (TUS) Anthony Johnston (TUS) Erika Geser-Engleitner (FHV) Edit Süle (SZE) Agnes Brinks (NHL Stenden) Michael Nugent (TUS) Patrick Ruane (Johnson & Johnson, Ireland) Paul Archbold (TUS) João Vilaça (IPCA) Norbert Kovacs (Smart Project Consulting Ltd, Hungary) Frank Doyle (TUS) Tania Marsh (TUS) Virve Kallioniemi-Chambers (HAMK) Markus Preißinger (FHV)

RUN-EU Research Challenge SAP Socio-Economic Transition in the EU (April 2023)	
Topic	**Delivered By**
• Think creatively • Improve research skills • Improve transversal and soft skills • Utilising new approaches for research • Improve sustainable and innovative thinking • Value driven tourism model interculturalism	SZE, Hungary TUS, Ireland

RESEARCH CHALLENGE SAP TOURISM (MAY 2023)	
Topic	**Delivered By**
• Understand the basics of research methodologies • Receive advanced training in emergent technologies • Improve transversal and soft skills through teamwork and cooperative project methodology • Improve innovative thinking in cooperation with others to achieve a common goal • Experience a multicultural international environment	IPCA, Portugal TUS, Ireland

Teaching Open Science Principles and Practices to Research Students (April 2023)	
Topic	**Delivered By**
• How these principles can be incorporated in research • Who can learn and teach? • Any negative implications • Best practice approach • How does open science relate to 'qualitative researchers'?	Jeffrey Buckley (TUS)

Introduction for FAIR Data (intermediate) (April 2023)	
Topic	**Delivered By**
• Introduction on FAIR data • Findability • Accessibility • Interoperability • Reusability	Ingrid van Gorkum (NHL Stenden) Jellie Visser (NHL Stenden)

Datamanagement Planning (June 2023)	
Topic	**Delivered By**
• A brief introduction to data management and data management planning • The importance of data management planning • Elements of the data management plan and DMP tools • Hands on! - Write a short data management plan in small groups.	Alie Mud (NHL Stenden)

SAP Research Challenge Accounting & Finance CCISF (July 2023)	
Topic	**Delivered By**
• Understand the basics of research methodologies • Receive advanced training in emergent technologies • Improve transversal and soft skills through teamwork and cooperative project methodology • Improve innovative thinking in cooperation with others to achieve a common goal • Experience a multicultural international environment	Patricia Gomes, (IPCA) Ana Dinis, (IPCA) Liliana Pereira, (IPCA) Sara Luis Dias, (IPCA) Paulo Leite, (IPCA) Patricia Gomes, (IPCA) Marta Guerreiro, (IPCA) Rui Robalo, (IPCA) Teresa Dieguez, (IPCA) Katia Lemos, (IPCA) Sara Serra, (IPCA) Sonia Monteiro, (IPCA)

SAP Research Challenge Artificial Intelligence (July 2023)	
Topic	**Delivered By**
• Understand the basics of research methodologies • Receive advanced training in emergent technologies • Improve transversal and soft skills through teamwork and cooperative project methodology • Improve innovative thinking in cooperation with others to achieve a common goal • Experience a multicultural international environment	Jao Vilaça, (IPCA) Pedro Morais, (IPCA) Antonio Moreira, (IPCA) Bruno Oliveria, (IPCA) Catia Alves, (IPCA) Daniel Miranda, (IPCA) Duarte Duque, (IPCA) Estela Vilhena, (IPCA) Helena Torres, (IPCA) Jaoquim Goncalves, (IPCA) Jose Brito, (IPCA) Luis Ferreira, (IPCA) Nuno Lopes, (IPCA) Vitor Carvalho, (IPCA) Siobhan Moane, (TUS) Patrick Murray, (TUS)

SAP Research Challenge Design ID+ (July 2023)	
Topic	**Delivered By**
• Understand the basics of research methodologies • Receive advanced training in emergent design methodologies and trends • Improve transversal and soft skills through teamwork and cooperative project methodology • Improve innovative thinking in cooperation with others to achieve a common goal • Experience a multicultural international environment	Paula Tavares, (IPCA) Jorge Brandão, (IPCA) Demétrio Matos, (IPCA) Nuno Martins, (IPCA) Marta Madureira, (IPCA) Miguel Terroso, (IPCA) José Raimundo, (IPCA) Siobhan Moane, (TUS) Patrick Murray, (TUS)

Annex 3: Enabling Mental Health workshop banner

Annex 4: Workshop participant Certificate of Attendance

REGIONAL UNIVERSITY NETWORK PLUS
EUROPEAN UNIVERSITY

CERTIFICATE OF ATTENDANCE
RESEARCHER CAREER DEVELOPMENT
TRAINING PROGRAMME 2022

This is to certify that **Name Surname** has participated as an attendee of the **RUN-EU PLUS WORKSHOP ON LOREM IPSUM**, jointly organised by RUN-EU partners within the scope of the **RUN-EU PLUS Researcher Career Development Training Programme 2022**.

0-00 Month Year

Professor Vincent Cunnane
President of TUS

TUS · POLITÉCNICO DE LEIRIA · HAMK · IPCA · SZÉCHENYI EGYETEM · NHL STENDEN · FHV Vorarlberg University of Applied Sciences · Horizon 2020 European Union Funding for Research & Innovation

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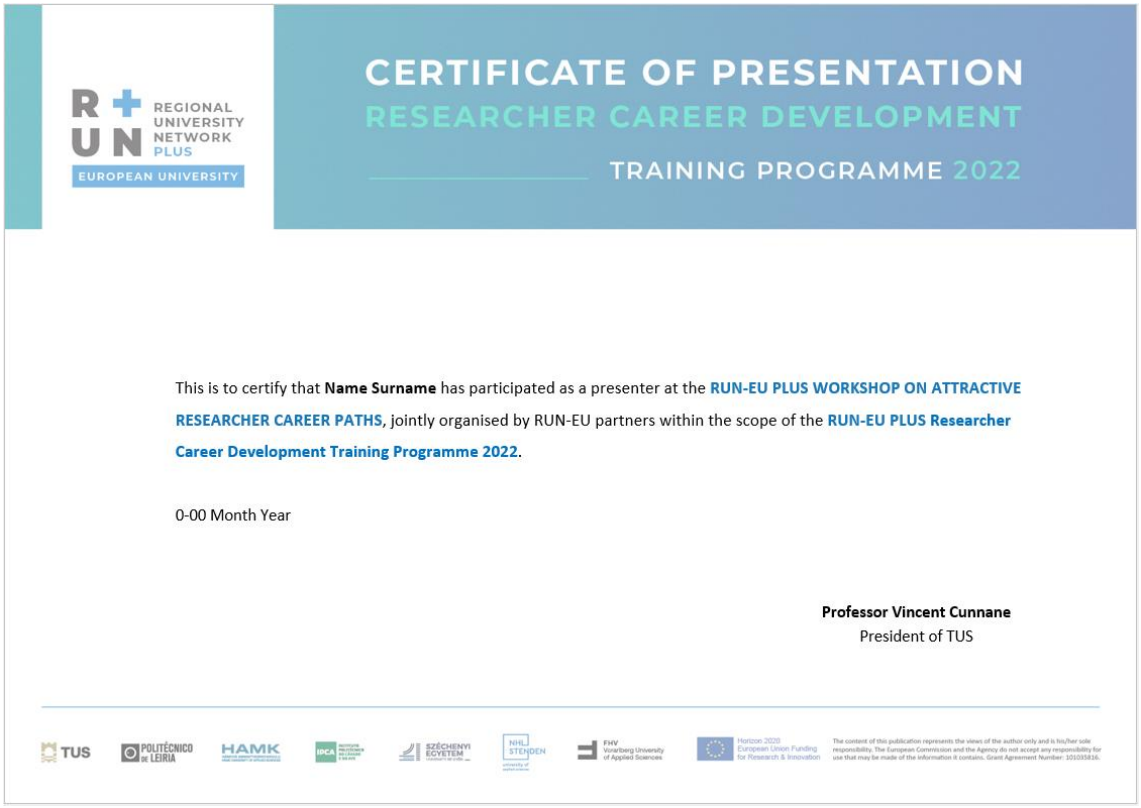
Annex 5: Workshop presenter Certificate of Attendance



REGIONAL UNIVERSITY NETWORK PLUS
EUROPEAN UNIVERSITY

CERTIFICATE OF PRESENTATION
RESEARCHER CAREER DEVELOPMENT
TRAINING PROGRAMME 2022

This is to certify that **Name Surname** has participated as a presenter at the **RUN-EU PLUS WORKSHOP ON ATTRACTIVE RESEARCHER CAREER PATHS**, jointly organised by RUN-EU partners within the scope of the **RUN-EU PLUS Researcher Career Development Training Programme 2022**.

0-00 Month Year

Professor Vincent Cunnane
President of TUS

Horizon 2020
European Union Funding
for Research & Innovation

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