

Work Package 5 - Increasing Regional Research Impact

Duration: M1 – M48

Lead Beneficiary: Örebro University (ORU)

Objectives

Research is one of NEOLAIa's three core missions as a European University (M1 Teaching, M2 Research, M3 Societal Engagement). Upon the mapping of NEOLAIa's research strengths and their relation with the UN Sustainable Development Goals (SDGs), we see our role not as a global leader in terms of high output number of scientific publications, but as an enabler of research with regional specialization. NEOLAIa will transform regional connectivity, by leveraging on regional research strengths and critical mass identified in the NEOLAIa bibliometric and specialization index analysis in section 1.1 and Objective 3 (with a proven track record output in research areas such as Global Health, Curbing Inequalities, Inclusion and Diversity and Digitalization Infrastructures, among others). These regional research strengths associated with a **Smart Regionalisation Strategy** will allow for a strong focus on transfer opportunities that are truly relevant for companies and universities from the participating regions. With this vision, NEOLAIa will aim at:

- Facilitating access to a comprehensive account of synergies across the NEOLAIa partners' research groups and centres in order to form new transnational research teams and projects, producing high-impact and meaningful research addressing societal challenges of regional relevance (T5.1).
- Fostering transnational research collaboration via the launch of the NEOLAIa Research Framework, outlining the principles for sharing research resources in an efficient, sustainable and quality-enhancing manner, aided by digitalization, to strengthen research quality and applicability (T5.1).
- Supporting research regional relevance and inclusion built on the combined strengths of NEOLAIa universities by establishing a detailed map of infrastructure and resources (e.g. technical equipment, databases, cohorts, staff, regional collaborative networks, and living/social/impact labs) that can be shared across NEOLAIa universities (T5.2).
- Creating expert support teams specialising in external research funding, academic career development and general research support for the benefit of regional engagement and the prevention of researcher brain-drain (T5.3).
- Providing enhanced quality and regional relevance of NEOLAIa research by offering targeted activities for Early Stage Researchers, leading to successful transnational networks and research projects through mobility and mentoring (T5.4).
- Constructing open digital platforms for co-creation of knowledge among stakeholders, resulting in, and based on, innovative regionally relevant and high-impact research linked to societal needs (NEOLAIa Living Lab Programme, and WP OpenScience) (T5.5).

5.1 Developing a NEOLAIa Research Framework

Task leader: Örebro University (ORU)

The **NEOLAIa Research Framework (NRF)** is an essential fundament for long-term, sustainable, and regionally relevant research collaboration within the alliance. It will address **how resources and infrastructures can be shared in an efficient and fair manner** among the universities. The aim of the NRF is to build on each other's strengths with the purpose of **supporting relevant, high-impact and inclusive research**. Further, the NRF will detail the **implementation of collaborative research** via concrete goals for obtaining joint research funding, for producing research outputs in the form of joint peer-reviewed papers, for the organization of NEOLAIa-led conferences and seminars, as well as for increased intermobility of our researchers. The NRF will also address issues related to:

- **Academic freedom and independence**, e.g. by working with organizations such as Scholars at Risk and by learning from our partners' previous experiences, such as in the case of UNIBI's project 'Bridge for Researchers in Danger Going to Europe' (<https://www.unibielefeld.de/uni/profil/international/bridgeprojects/bridge2/>).
- **Regional relevance**, by engaging stakeholders in identifying challenges they face and how NEOLAIa researchers can contribute to help solve these challenges.
- **Diversity and inclusion** (WP3), promoting concrete ways of addressing these issues in research-related areas, such as closing the gender gap in STEM fields (science, technology, engineering and mathematics) and supporting incoming researchers with needs to broaden their skills in local languages and cultures (WP7).
- **Academic careers**, both within academia and beyond, related to the Human Resources policy further discussed in T9.3.
- **Green and digital Europe**, e.g. by sharing best practices for sustainable internationalization, research, and Open Data access (WP8).
- **Mobility and academic exchange** through both physical and virtual long- and short-term mobility (WP4).
- **Research Ethics**, supporting NEOLAIa universities' commitments to follow international ethics policies in the course of transnational collaboration between NEOLAIa researchers.

To further support the transnational research projects and NEOLAIa research teams, as well as the actions 'NEOLAIa High-Impact Research' and the 'NEOLAIa Living Lab Programme', each university will contribute **seed funding** for establishing joint NEOLAIa projects involving, for instance, regional research cooperation and outreach. Individual researchers at each university will be able to apply for such seed funding, thus incentivizing research engagement and participation. Details on seed funding will also be given in the NRF.

5.2 Mapping NEOLAIa research resources and synergies

Task leader: Örebro University (ORU)

To provide a foundation for the development of the NEOLAIa Research Strategy (T5.1) and to support the activities in T5.3, T5.4 and T5.5, we will carry out **detailed mappings of research and infrastructure at all NEOLAIa universities**. By building on each other's strengths, we will achieve **better research outcomes** than we otherwise would have been able to as individual regional universities.

Infrastructure and staff are key resources to support joint research projects within the NEOLAIa Pillars (see section 1.2). Here, the pooling of resources and expert knowledge means that we can build on each other's respective strengths to support NEOLAIa's long-term goal of producing research that is of high impact, regionally relevant, and inclusive. Based on a previous coarse-grained mapping of research resources, a **detailed mapping** will now be carried out in order to **identify areas where use of resources** (e.g. unique and costly technical equipment, databases, cohorts, staff, regional collaborative networks, living/social/impact labs, facilities, and public-facing activities/events disseminating research results) **can be pooled**.

Research synergies were previously identified in a preliminary mapping of research publications and collaboration possibilities among NEOLAIa universities. A **further mapping of areas for collaboration between research groups and centres** across all NEOLAIa partners will now be carried out, focusing specifically on **research within the NEOTrends**. In addition, **formative meetings, seminars and conferences** will be held to incentivize the **creation of new transnational research projects**. From this, **new NEOLAIa-based research teams will be formed** that are capable of producing highly applicable, challenge-based, multi-disciplinary and innovative research focused on the NEOLAIa Pillars, on the NKAA and on regional development.

5.3 Creating NEOLAIa Expert Support Teams

Task leader: University of Tours (UT)

Based on the first mapping of resources (described in T5.2) and the already-established collaboration among NEOLAIa universities, we have identified the need to develop **2 types of structures** in order to provide a stable basis for future research development and sustainability, fostering regionality, diversity, inclusion and gender equality: (a) the NEOLAIa Research Support Team, and (b) the NEOLAIa HRS4R Team.

a) The NEOLAIa Research Support Team: NEOLAIa will create an **overarching team of staff working in the field of research support** in faculties, schools, departments, units and centres (related to e.g. mobility, policy, funding, and outreach). The goal of this team is twofold: a.) the **sharing of experiences** to pave the way for **closer and more extensive cooperation** (as well as for the development of shared support practices) **within the team** by engaging in both on-site and virtual mobility; b.) providing researchers at all partner institutions research support that is more knowledgeable, specialized, and experienced than any single institutions own support function is. This is accomplished by **pooling and sharing resources and expertise** within the team. To achieve these goals, the NEOLAIa Research Support Team will host **seminars and workshops** within topics related to the NEOTrends, thus leveraging NEOLAIa's existing capabilities to **achieve impact, increase outreach, and optimize result dissemination**. They will also identify **relevant research collaborations** across partners. This will be based on the research synergy mapping in T5.2, as well as on the in-depth understanding the team members will receive of the research at the partner universities.

b) The NEOLAIa HRS4R Team: Attractive, sustainable, and flexible academic careers are of key importance to ensure research quality (see T5.4 d). In addition, classical research-intensive universities situated in capital cities naturally attract talent and benefit from their role as the centre of demographic gravity; the NEOLAIa universities will proactively work to curb brain-drain. Therefore, a human resources (HR) network will be created to work with the European Charter for Researchers, the Code of Conduct, the Human Resources Strategy for Researchers (HRS4R) and EURAXESS: this will be the NEOLAIa HRS4R network. The **universities that already hold the HRS4R award** (Örebro, Jaén, Tours, Ostrava) will **cooperate with each other** while **supporting partner universities that do not yet hold the HRS4R award** but share the firm aim of obtaining it. This cooperation will thus allow the network to **identify areas where NEOLAIa can work on common HR policies, guidelines and procedures**. One example of such a collaboration includes the development of **best practices** for incoming researchers and their accompanying families – something that is of key importance when seeking to attract international talent, not only to our universities but also to other regional organisations. Such a collaboration would thus strengthen **regional competitiveness** and **retain local talent**. The NEOLAIa HRS4R network will engage in both **physical and virtual mobility**.

5.4 Designing actions for NEOLAIa High-Impact Research

Task leader: Örebro University (ORU)

By building on each university's strengths in terms of research resources and regional anchoring (as mapped in T5.2), **high-impact and innovative research** addressing the NEOLAIa Pillars and NKAA will take place.

Transnational cooperation within NEOLAIa will build on these strengths in order to provide a **solid regional research basis** for the alliance as a whole, enabling universities that are less prominent in some areas to gain support and experience from their NEOLAIa partners. This will result in NEOLAIa becoming a **strong, diverse, inclusive, and sustainable research alliance**.

In addition to supporting new collaborative opportunities, as described in T5.2, the activities below are aimed at **strengthening the skills of individual NEOLAIa researchers**, especially in the research fields where NEOLAIa displays its highest impact (see NEOLAIa analysis on SDGs and scientific production in the appendix), leading to: (a) increased levels of external funding, (b) increased number of research papers published in high-impact peer-reviewed journals, (c) increased regional utilization of innovative research results and methodologies, and d) fostering of sustainable and flexible careers attractive for both academic and non-academic organizations.

NEOLAIa ESR Seminars: We will host NEOLAIa seminars for Early-Stage Researchers (ESRs) with a focus on **promoting and enhancing research quality from a regional perspective**. This will support NEOLAIa researchers in their ambitions to contribute to research impact and excellence. The seminars will address topics such as publishing, Open Data sharing, research funding, career planning, Ethics in Science, research communication, regional outreach, etc. Furthermore, the seminars will focus on generic skills, such as scientific and research proposal writing, CV writing, leadership skills, pedagogics, innovation in research, etc. The seminars will also add intercultural and regional dimensions to the abovementioned topics. By identifying intercultural differences and regional synergies between different countries, we will also be addressing the intercultural objectives of WP7. The seminars will be held **digitally** and will be open to all NEOLAIa ESRs. **NEOLAIa**

Mentorship Programme: Created for **ESRs**, the programme is open to **PhD students** as well as to **postdoctoral researchers** from all NEOLAIa universities. The programme will serve to **broaden the participants' networking skills** and to **offer expert advice on future career building** within or outside academia, as well as on a regional, national and international level. Mentees will be matched with mentors from other NEOLAIa universities, Associate Partners or other regional organisations, in order to provide expert knowledge on research and topic-specific matters, as well as on career advice. The programme will primarily be **digital**, but will include at least one activity requiring **physical mobility**. In addition to the research activities set out in this WP, there are activities geared towards educational enhancement for PhD students in the Teaching and Learning WP2 (please refer to PhD Students Collaboration Forum in T2.1 within the Pedagogical Hub).

5.5 Launching the NEOLAIa Living Lab Programme

Task leader: University of Tours (UT)

The aim of the **NEOLAIa Living Lab Programme**, which is implemented at all partner universities, is to **develop a regional outreach-oriented approach** involving diverse regional stakeholders: industry, larger companies with a regional profile, SMEs, local and regional public authorities, NGOs, other civil society actors, etc. Working within a collaborative perspective, these stakeholders will identify challenges to be solved, co-produce studies, discuss solutions, and disseminate results. The goal is to **increase the potential use of research results** and to **help solve regional challenges** experienced by citizens, NGOs, economic operators, public authorities and society as a whole. This will be achieved through a **diverse and inclusive Citizen Science approach** using responsible research, innovation, and Open Data/Open Science (T8.1 and T8.2).

The NEOLAIa Living Lab Programme will also address **Agenda 2030 and global challenges** by promoting citizen engagement in societal change activities and provide an open, regional, inclusive, transdisciplinary platform for the codesign, co-creation, co-production and outreach of innovative research with and for society, focusing also on the NKAA of Global Health and the 3 key NEOLAIa Pillars. In addition, the **NEOLAIa partners are particularly strong in research relating to sustainable development goals (SDGs) 3, 4, 5, 10, and 16** (see section 1.1.4. and annex section for NEOLAIa SDG specialization analysis). Therefore, these SDGs will be of particular importance in the Living Lab. We will share experiences already gained from a number of existing living labs in order to enhance the creation of new experiences; examples of existing living labs that will serve as inspiration in this process include the Social Impact Lab at ORU (<https://www.oru.se/english/collaboration/innovation-and-ideadevelopment/social-impact-lab--innovation-to-overcome-societal-challenges/>) and the Usetech' Lab at UT (<https://usetechlab.com/>). The experiences gained and the actions developed will be **regionally shared** with the general public and civil society.

Creation of the NEOLAIa Living Lab Hub: This will be a **forum for discussion, exchange of best practices** and a means to run a **joint project incubator**. This hub is composed of at least 4 living lab specialists from NEOLAIa partners or other universities and Associate Partners, 2 other representatives of each NEOLAIa partner

interested in the initiative, as well as regional stakeholders from each NEOLAiA region. The NEOLAiA Living Lab Hub will also organize seminars and workshops that will be open to members of the partner universities, as well as participants from other universities and relevant stakeholders:

- **2 on-site one-day seminars** will focus on (a) the theoretical/academic aspects of living labs (ethical and societal issues, methodology, regionality, etc.); and more broadly, actions facing towards (b) the general public and (c) civil society. In addition, these seminars will cover the operational and technical aspects of living labs (searching for partners, financing, premises, equipment, etc.). Each seminar will also offer opportunities for regional and transnational networking. Greater impact and outreach will be assured by online streaming.
- **2 remote workshops per year** aimed at sharing experiences from existing living labs.

All these activities will be made available via public dissemination systems (Open Educational Resources, OER) to ensure greater outreach and regional impact.

Deliverables

D5.1 - Work plan and organizational structure

Lead: Örebro University (ORU)

- M5
- Detailed workplan and organizational structure formalized in a shared document. Electronic format. In English (5 pages).

D5.2 - Intermediate report on High- quality research with regional impact

Lead: Örebro University (ORU)

- M24
- Intermediate report on the NEOLAiA research activities. Based on early results and experiences. Electronic format. In English (15 pages).

D5.3 - White paper: High- quality research with regional impact

Lead: Örebro University (ORU)

- M44
- White paper on the NEOLAiA strategy to promote research quality, impact, outreach, and engagement of regional stakeholders in research. Electronic format. In English (30 pages).

Milestones

M5.1 - First NEOLAiA Research Framework issued

Lead: Örebro University (ORU)

- Designing the common framework for the implementation of joint research projects and teams; sharing of research resources and infrastructure; topical issues related to research; seed funding.
- M18, updated M36
- Report, made available digitally in all NEOLAiA languages.

M5.2 First Map research resources published

Lead: Örebro University (ORU)

- Detailed mapping of research resources at NEOLAiA universities that can be shared among the partners.
- M12, updated M24, M36 and M48
- English-language report, made available digitally.

M5.3 First Map research synergies issued

Lead: Örebro University (ORU)

- Mapping of research to identify areas for building deep, longterm and sustainable transnational research teams with a strong regional anchoring.
- M12, updated M24, M36 and M48
- Creation of joint transnational research teams across the NEOLAiA universities.

M5.4 Creation of the NEOLAiA Expert Teams

Lead: University of Tours (UT)

- Creation of the NEOLAiA Research Support Team, and the NEOLAiA HRS4R Team.
- M12
- Staff from each university will participate in the NEOLAiA Research Support Team that will host at least 4 seminars/workshops on different topics each year. They will also engage in physical and virtual mobility. The HRS4R Network will enable additional NEOLAiA universities to obtain the HRS4R award. A best practices guide will be developed for incoming researchers and their accompanying families.

M5.5 NEOLAiA ESR seminars initiated

Lead: Örebro University (ORU)

- Implementation of seminars to promote and enhance research quality and academic careers.
- M48 (launched M13)
- Four yearly on-line seminars during year two to four on different topics for NEOLAiA ESRs.

M5.6 NEOLAiA Mentorship Programme started

Lead: Örebro University (ORU)

- Initiation of the matching with other NEOLAiA universities or regional organizations to provide expert knowledge on research-specific matters as well as career advice.
- M48 (launched M13)
- Two 18-month programmes will be held. The programme will primarily be digital, but it will include at least one physical mobility during each run.

M5.7 NEOLAiA Living Lab Programme launched

Lead: University of Tours (UT)

- Creation of the NEOLAiA Living Lab Programme with activities that promote and enhance the participation of regional stakeholders in the research conducted within the consortium.
 - M48
 - Two on-site seminars. Eight online workshops. Composition of, and activities within, the NEOLAiA Living Lab.
-