PORTUGUESE REPRODUCIBILITY NETWORK

TERMS OF REFERENCE

> **Note.** This is the current version (date: 21/September/2021) of our terms of reference, which is an evolving document. These terms will be revised/updated as the necessities of our organization changes.

VISION

To promote the adoption of replicable, transparent, robust, and rigorous research practices in all scientific disciplines in Portugal.

PURPOSE

The **Portuguese Reproducibility Network** (PTRN) is a peer-led consortium that promotes the adoption of replicable, transparent, robust, and rigorous research practices in Portugal. The ultimate goal is to promote responsible and sustainable research that can have an impact on relevant societal problems. Accordingly, the network facilitates:

    (a) the organization of discussion forums and training activities,

    (b) the curation of materials and resources,

    (c) the systematization of recommendations regarding best scientific practices, and

    (d) the investigation and dissemination of best research-practices.

We also work with stakeholders (e.g., funders, publishers, scientific societies) and other reproducibility networks (e.g., UKRN, SWISSRN, DERN) to ensure the coordination of efforts nationally and internationally. The PTRN is committed to improve research practices in Portugal, and it also works with other international reproducibility networks whose goals align with the aims of the PTRN to coordinate efforts in examining and disseminating best research practices in all scientific disciplines.

The activities of the PTRN span multiple levels: researchers, research groups, faculties, institutes, funders, the public, and regulatory authorities. We seek to have a transdisciplinary and multi-institutional representation across the whole country.

ORGANIZATION

The organization of the PTRN follows that used by other international reproducibility networks (i.e., UKRN, DERN, SwissRN). PTRN consists of a Steering Group, Local Nodes (led by Local Node Leaders), Institutions, and a Stakeholder Engagement Group. The general structure is detailed at the Annex 1 (Model Description – Local Node and Local Node Leader) and Annex 2 (Criteria for Joining PTRN).

The **Steering Group**, which consists of three to four persons, is responsible for the overall coordination of PTRN activity and strategy. The Steering Group is advised by an external Advisory Board comprising (senior) academics from the international research community with expertise related to the goals of the network. Members of the Advisory Board are asked to serve a three-year term in the first instance, with the option to renew this for a further three years at the end of this term. The current Steering Group was formed to establish the PTRN. This formation is expected to serve a term of three years, after which a peer-election procedure to appoint a new Steering Group will be established.

Local Nodes provide a mechanism through which the aims of the PTRN can be promoted within a given institution (e.g., by establishing open research working groups, running training workshops, advocating for the wider adoption of best practices within the institution, etc.). A Local Node Leader provides the point of contact for PTRN, and represents a grass-roots network of researchers at that institution. It is intended that these Local Nodes will grow, both in number and size, over time, as researchers elect to participate in PTRN activities. Local Nodes are self-organizing, but we encourage them to ensure their membership is open to academic and research staff (at all levels) and professional services staff.

Institutions can join the PTRN if the senior management formally commits to supporting the aims of the network, identifies a responsible person in the management structure leading their implementation at the institution, e.g. through training programs at all levels.

Stakeholders who support the PTRN form the Stakeholder Engagement Group. This ensures that PTRN activity is aligned with the strategy and activity of the stakeholders, and allows the exchange of ideas. In addition, the relationship between the Stakeholder Engagement Group and the PTRN provides stakeholders with a mechanism for obtaining feedback on new initiatives from the research community.

MEETINGS

The **Steering Group** meets approximately once **every quarter** in person or virtually to discuss and evaluate the activities of the network, plans, and the strategy of the PTRN, feedback from Local Nodes, and input from stakeholders and institutions.

The progress of PTRN activities will be reviewed, and strategy and directions agreed upon in an **annual meeting with all interested parties** including Local Node Leaders and members, representatives of institutions and stakeholders as well as advisory board members. Specific projects for future work will be identified through this process, both within the PTRN, and between the PTRN and the individual stakeholders. Where appropriate, proposed initiatives or partnerships, changes to our Terms of Reference and other issues can be voted on at the annual meeting by simple majority. Every member of the Steering Group, and every Local Network Lead and Institutional Lead has one vote.

ACCOUNTABILITY

The Steering Group reports to the Local Node Leaders, Institutions, and to the Stakeholder Engagement Group by means of an **annual report** in preparation of the annual meeting. PTRN Local Node Leaders work with and through the Steering Group. Individual members report to their Local

Node Leaders, and Local Nodes are responsible for their internal governance (which may vary depending on the size of the Local Node, geographical distribution of the institution, etc.).

The Steering Group and the Local Node Leaders operate with the consent of the individual members. Institutional senior management is expected to work in partnership with Local Nodes, to ensure coordination of activity and that any local initiatives are developed with the input of Local Node Leaders and members.

IMPLEMENTATION

PTRN coordinates activity across Local Nodes in its three focus areas:

1. Education: design and establish appropriate training activities (e.g., delivery of short courses to early career researchers, conception of basic training modules for Bachelor and Master students, preparation of online materials; coordination of virtual seminars and journals clubs)

2. Communication: dissemination of new evidence in research reproducibility, propagation of best practices, and promotion of a culture change in the scientific community.

3. Transformation: design and evaluation of research improvement measures and policy in collaboration with stakeholders.

Information about the Network is presented on the PTRN website at www.ptrn.pt, including links to resources (e.g., training materials), news about upcoming events, and information about joining the Network.

PTRN will provide a regular newsletter on relevant events, evidence and activities. It will also be active on social media with the goal of networking and engagement within the scientific community and the general public.

Annex 1

Model Description – Local Node and Local Node Lead

A PTRN **Local-Node** at an individual Portuguese higher education institution consists of an informal group of researchers (potentially from a diverse set of disciplines) and from all career stages interested in issues of research reproducibility and improvement. As a member of the PTRN, local nodes are expected to facilitate the communication of reproducibility-related issues between teams within the institution, and to link the institution to the wider PTRN community, partly through engagement in PTRN activities and partly through communication with the PTRN steering group.

The role of the PTRN **Local Node Leaders** is to initially build or to continue to promote such a group. They should be motivated towards improving responsible research (i.e., reproducible, robust, and open research practices) within their institution. In order to achieve this, the Local Node Leaders should have a good level of understanding (or a willingness to learn) about the institution's processes and how various teams within the institution work and interact. Where an institution is a formal member of PTRN, the Local Node Leader will work closely with the responsible person in the management structure to coordinate efforts.

The PTRN will communicate regularly (either via meetings, email or teleconference) with the local-node leaders to receive their feedback and to share knowledge on what works/doesn't work at the PTRN-affiliated institutions.

As the structure and function of different Local Nodes is likely to differ considerably between institutions, activities performed by the Local Node Leaders will be context-dependent.

General responsibilities include:
● Disseminating information from PTRN on events, new initiatives, etc.
● Gathering information and views from Local Node members to feed back to PTRN
● Sending regular updates to the PTRN coordinator with any news from the Local Node

Suggestions of local activities:
● Initiating or coordinating initiatives within the institution to promote reproducibility
● Initiating or coordinating a ReproducibiliTea Journal Club
● Initiating or coordinating an Open Research Working Group
● Initiating or coordinating peer groups for mutual grant or ethics proposal review
● Maintaining dialogue with other key groups within their institution that may promote Open Research (e.g., Library Services, Research Governance Teams, Data Repository Teams etc.)

Annex 2

Criteria for Joining PTRN

Criteria for joining as a Local Node

Membership in PTRN is open to any Local Nodes at individual higher education institutions in Portugal whose purpose is in alignment with the PTRN aims. A Local Node Leader represents them within the PTRN.

PTRN will complement the activities of the Local Nodes and stakeholders, and allow greater coordination of activity across these. For each Local Node, this will provide peer support from colleagues across a community who are engaged with efforts to improve the quality of Portuguese research, allowing synergies across institutions in Portugal, and ensuring that we retain our international competitiveness.

Criteria for joining as an Institution

The primary criterion is that the institution's executive board or senior management formally commits to supporting the aims of the network, identifies a responsible person in the management structure leading their implementation at the institution, e.g. through training programs at all levels.

We expect that institutions wishing to join the PTRN will want to develop capacity to deliver a research improvement strategy, and to work with PTRN to develop a strategy for ensuring the sustainability of the Network in the medium- and long-term, and to build a community of institutions focused on research improvement.

Criteria for joining the stakeholder engagement group

Potential stakeholders include funders (both governmental and charity) and non-profit organizations that are part of the academic environment.
To join the Stakeholder Engagement Group, an organization has to provide some form of support to PTRN and is required to agree to our mission and values.