Swiss Reproducibility Network (SwissRN) Terms of Reference

Version 0.5, January 2021

Vision

To promote and ensure rigorous research practices and robust research results in Switzerland.

Purpose

The Swiss Reproducibility Network (SwissRN) is a peer-led consortium that aims to promote and ensure rigorous research practices in Switzerland by establishing appropriate training activities, designing and evaluating research improvement efforts, disseminating best practice, and working with stakeholders to ensure coordination of efforts across the sector. SwissRN's activities span multiple levels, including researchers, institutions and other stakeholders (e.g., funders and public authorities).

SwissRN originated from activities seeking to understand the factors that contribute to poor research reproducibility and replicability, and to develop approaches to counter these and improve the quality and robustness of the research we produce. These issues affect all empirical disciplines, so SwissRN aims for broad disciplinary representation and an intensive interdisciplinary dialogue and feedback loop. SwissRN's position is that ongoing efforts to address these issues represent an opportunity to improve our research by reforming culture and practice.

Scope

The focus of SwissRN is on rigor of research practices and robustness of research results. Reproducibility is a basic requirement for robust research results and as such SwissRN shares some of its goals with Open Science standards such as the TOP guidelines. But the goals of SwissRN are broader than openness and transparency since they include on top of reproducibility also integrity and rigor, validity and replicability, efficiency and quality, robustness and generalizability.

Organization and membership

SwissRN consists of a Steering Group, Local Nodes (led by Local Node Leaders), Institutions and a Stakeholder Engagement Group. See Annex 1: Model Description – Local Node and Local Node Leader and Annex 2. Criteria for Joining SwissRN.

The **Steering Group**, which consists of three to four persons, is responsible for the overall coordination of SwissRN activity and strategy. A part-time administrator, the SwissRN coordinator, supports it.

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.

Local Nodes provide a mechanism through which the aims of the SwissRN can be promoted within that institution (e.g., by establishing open research working groups, running training workshops, advocating for the wider adoption of best practice within the institution, etc.). A **Local Node Leader** provides the point of contact for SwissRN, 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 SwissRN 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 SwissRN 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 SwissRN form the Stakeholder Engagement Group. This ensures that SwissRN 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 SwissRN 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 new / emerging evidence, training etc. of relevance to SwissRN, feedback from Local Nodes, and input from stakeholders and institutions.

In an annual meeting including Local Node Leaders and members, representatives of institutions and stakeholders as well as advisory board members progress of SwissRN activities is reviewed, and strategy and direction agreed upon. Specific projects for future work will be identified through this process, both within the SwissRN, and between the SwissRN and the individual stakeholders.

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.

SwissRN 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

SwissRN 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, propagation of best practices, and promotion of a culture change,
3. Transformation: design and evaluation of research improvement measures and policy in collaboration with stakeholders.

Information about the Network is presented on the SwissRN website at www.swissrn.org, including links to resources (e.g., training materials), and information about joining the Network.

SwissRN 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.

While the focus of SwissRN is on improving Swiss research, an important role is to work with those in other countries who share our objectives of improving research, e.g. the Reproducibility Networks in the UK, Germany and Australia.

Annex 1: Model Description – Local Node and Local Node Lead

A SwissRN Local Node at an individual Swiss 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. This can include facilitating communication on reproducibility-related issues between teams within the institution, and linking the institution to the wider SwissRN community, partly through engagement in SwissRN activities and partly through communication with the SwissRN steering group.

The role of the SwissRN Local Node Leader is to initially build or to continue to promote such a group. This should be motivated towards improving reproducibility and Open Research within their institution. In order to achieve this, they 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 SwissRN, the Local Node Leader will work closely with the responsible person in the management structure.

As the structure and function of different Local Nodes is likely to differ considerably between institutions, activities performed by the Local Node Leader will be context-dependent. However, specific responsibilities may include:

- Disseminating information from SwissRN to its members on events, new initiatives, etc.
- Gathering information and views from Local Node members to feed back to SwissRN
- Sending regular updates to the SwissRN coordinator with any news from the Local Node
- 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
- Communicating regularly (either via meetings, email or teleconference) with other SwissRN representatives and local leads to share knowledge on what works/doesn't work at other SwissRN -affiliated institutions
- 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 SwissRN

Criteria for Local Node membership

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

SwissRN 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 Swiss research, allow benefiting from synergies across Switzerland, and ensuring that we retain our international competitiveness.

Criteria for institutional membership

The primary criterion for membership 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 seeking membership of SwissRN will want to develop capacity to deliver a research improvement strategy, and to work with SwissRN 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 membership in the stakeholder engagement group

Potential stakeholders include funders (both governmental and charity) and non-profit organizations that are part of the academic environment, e.g., swissethics, 3RCC, SCTO etc. To become a member of the Stakeholder Engagement Group an organization has to provide direct financial support or support in kind to SwissRN and is required to agree to our mission and values.