

Leipzig, 26 January 2024

## General information about the sDiv framework

### 1 About iDiv

The **German Centre for Integrative Biodiversity Research (iDiv)** Halle - Jena - Leipzig is the seventh **National Research Centre** with **nine Professorships, five junior research groups, the graduate school yDiv, the Integrative Biodiversity Data and Code Support Unit, IT and Outreach unit and the Synthesis Centre for Biodiversity Sciences (sDiv)**. iDiv is funded by the German Research Foundation (DFG FZT 118). It is run by Martin Luther University Halle-Wittenberg (MLU), Friedrich Schiller University Jena (FSU) and Leipzig University (UL) – and in cooperation with the Helmholtz Centre for Environmental Research (UFZ). The centre is located in Leipzig. It is additionally supported by the Leibniz Association, the Max Planck Society, and the Free State of Saxony.

### 2 Goals of sDiv – the tool to create synergy

**sDiv, iDiv's synthesis centre, provides global leadership on synthesizing knowledge of biodiversity change, its underlying processes and consequences for the functioning of ecosystems. We want to understand the complexity of ecological processes and to design effective actions to protect and sustain our natural world.**

Though a well-known research centre and brand on its own, sDiv is a well-integrated research unit of iDiv, with over 400 employees and [members](#) (i.e. colleagues of 11 collaborating institutions), covering a wide spectrum of modern integrative biodiversity research.

The core of the iDiv philosophy is that of synergy and integration, which is achieved by the **interaction between sDiv visitors and resident scientists**. Formally, this is achieved by **inclusion of at least one [iDiv member](#)** (full & associated members are eligible) **in each sDiv project** (e.g. as working group participant, Co-PI, mentor, supervisor), by a mandatory seminar open to all iDiv scientists during the course of each project meeting, teaching opportunities in yDiv, lab meetings etc. We hope that sDiv visitors will bring in fresh ideas and views and may be interested in collaborations with iDiv scientists beyond the scope of their projects. The body of resident iDiv scientists in turn represents a unique concentration of expertise in biodiversity science globally and sDiv project participants are encouraged to approach them for help and discussions.

Together with a large group of international synthesis centres, sDiv is part of the informal [International Synthesis Consortium](#). The involved centres exchange experiences, tools and ideas and most importantly, we collaborate on joint calls and projects of high societal relevance.

**sDiv is led since 11 years by [Dr. Marten Winter](#)**, a *highly cited* scientist with a strong background in biodiversity research, macroecology and biological invasions. He is part of several advisory boards and supports synthesis centres and related initiatives worldwide with his extensive expertise. At iDiv he is strongly supported by dedicated administrative teams. sDiv is supported by iDiv's General IT Support Unit, Integrative Biodiversity Data and Code Support Unit as well as the centre's administration.

As part of our equal opportunity policy, **iDiv provides an option for flexible childcare** while you are attending the meetings or, in case of a longer stay, while you are waiting for other childcare options. If you have any further questions regarding this subject, please contact the sDiv head.

In a nutshell: **sDiv, the Synthesis Centre of iDiv, is an incubator for new ideas – a think tank and place of inherent horizon scanning. This “hot spot” of biodiversity science** brings together extremely skilled and open-minded international scientists in a very interactive and fruitful atmosphere, and last but not least is being situated in Leipzig, a great place to live or visit and the top destination in Germany according to the latest Lonely Planet (2021).

### 3 Main instruments of the Synthesis Centre

The [sDiv executive board](#) will be supported by a flexible evaluation board where experts are invited on a case-by-case basis, depending on the competences needed for the evaluation of the submitted proposals.

We accomplish synthesis through a diversity of research activities. We currently support and envision maintaining (1) working groups, in which diverse groups of scientists come together pool their knowledge and skills and produce synthetic results and understanding, regularly supported by (2) synthesis postdocs, which are the best dedicated young researchers from around the world and with (3) more flexible synthesis projects allowing a combination of personnel and meeting approaches.

#### Main sDiv funding program lines:

- **Synflex projects (including working groups)**
- **Early career researcher (ECR) working groups**
- **Individual Postdocs**
- **Postdocs for funded sDiv projects**

#### General characteristics of synthesis projects in sDiv

Applications are **open to all scientists worldwide**. All synthesis topics in biodiversity research are welcome, ranging from biology to social or computer sciences. Proposals should address novel questions or examine known problems from an innovative synthesis perspective. Topics should fall into one of the five research areas of [iDiv's biodiversity research](#) and should have strong links to iDiv's research mission regarding [Integrative Biodiversity Research](#). In addition to synthesis topics of general importance for biodiversity science, we also encourage biodiversity related synthesis topics that are of great importance for the future development of the applicant's country or region of origin but nevertheless have a strong connection to overarching research questions and/or applicability beyond the applicant's region. We also encourage the mobilization and usage of data itself from research-wise underrepresented regions.

Projects should focus on a specific topic with the aim of delivering a specific product. Outcomes are typically multi-author high-quality and ideally high-impact scientific publications. **Existing and new concepts, theories, approaches to data exploration, experiments, modelling and synthesis can be discussed and developed, with a strong and direct link integrating existing approaches and fostering, directly or indirectly, predictive biodiversity theory.** Similarly, projects that initiate collaborative projects beyond the sDiv project itself are highly welcome. Projects may address socio-economic aspects of biodiversity science and can involve stakeholders; deliverables can include concepts for practitioners of how biodiversity can be safeguarded and tools to disseminate such concepts to policy makers and the stakeholder community (e.g. software, websites, and databases). sDiv also provides strong support for [virtual collaborations](#).

Though sometimes project ideas may be risky, they should provide evidence that sufficient data and appropriate analytical tools are available or will be developed to tackle novel questions. The availability of the data has to be indicated in the proposal.

### Synflex projects

Synflex projects are research projects with a budget that can be used flexibly for different approaches (i.e. modules) and possibly combined. Creativity is encouraged. **Examples** for potential funding approaches/modules are e.g. short-term guests, scientific support staff (based in Leipzig) and/or working group meetings.

### Early Career Researcher (ECR) Working Groups

ECR working groups are small synthesis working groups (two or three meetings) **led and driven by early career researchers** starting. With this funding scheme we aim to allow early-stage scientists to conduct synthesis projects in a stimulating and supportive international environment. ECRs are PhDs or Postdocs who completed their PhD no more than 6 years in the past, counted with the call deadline. Successful groups consist of **people with excellent expertise but also with dedication and time to participate** in the meetings and to work on the working group goals. The size of the working group is limited to eight scientists, including max. two senior scientists. Both main applicants need to be ECRs. At least one PI must have submitted the PhD thesis. The senior researchers are meant to contribute with their expertise but should not lead or dominate the team. Also, they must not be the supervisors of any early career researchers involved (past and present).

### Postdoc projects

The aim of the sDiv postdoc fellowships is to allow generally **early career scientists to conduct synthesis projects** in a stimulating and supportive international environment. Therefore, postdoc projects addressing synthesis and theory projects, preferably those capitalizing on data available, e.g. through iDiv platforms, will be preferentially considered. **Any postdoc at sDiv will receive supervision and mentoring by an iDiv researcher.** The mentoring programme includes attendance in lab meetings, a general support for career development via the [iDiv Postdoc career support programme](#), e.g. including possibility of attending and leading courses at iDiv's graduate training school yDiv, co-supervision of PhD students (if applicable), and many other career counselling aspects.