# Call for modular flexible synthesis projects (SYNFLEX)

Final funding approval for 2025 and beyond cannot be 100% guaranteed yet and is subject to the final approval of iDiv funding, which is planned before the project of this call will start.

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### List of relevant documents & links:

- sDiv call website including necessary documents for proposal submission
- the general mission and ideas behind iDiv and sDiv
- the five research areas of iDiv's biodiversity research
- <u>iDiv's research mission in the field of integrative biodiversity research</u>
- <u>iDiv application portal</u>
- sDiv budget tool
- List of iDiv members
- <u>List research-wise under-represented regions</u>
- <u>iDiv data and code sharing policy</u>

### 1 General information and rules

This call is for conducting synthesis research projects (starting in January 2025) in a stimulating and supportive international environment with the flexibility to use a diverse set of modules. Creativity is encouraged.

**Examples** for potential funding modules which can be combined within one project are:

- Short-term guests (e.g., travel, housing, potentially other expenses)
- Scientific support staff (based in Leipzig)
- Working group meetings
- Travel costs (e.g., conferences/ workshops/ inquiries/ meetings with project partners)
- · Catalysis meeting

Please see Appendix I for more information on modules and important rules to follow when developing your SynFlex project.

Applications are open to scientists worldwide. sDiv, like iDiv, is committed to establishing and maintaining a diverse and inclusive community that collectively supports and implements our mission to do great science. We will welcome, recruit, develop, and advance talented staff from diverse genders and backgrounds. We encourage proposals that engage genuinely with topics and researchers from research under-represented regions (see list here). This could come in various ways that are important for regional biodiversity research as well as building synthesis connections beyond those regions. If you plan to work

with researchers from and questions relevant for under-represented regions, proposals should co-design and collaborate with researchers in under-represented regions, recognizing differences in scientific culture, interests and needs (more information <a href="https://example.com/here">here</a>).

Most activities should take place either at iDiv (working group meetings, short-term guests, workplace of scientific support staff, catalysis meeting) or have to involve the iDiv collaborator (outgoing visit). Alternatively sDiv supports virtual collaborations in various ways. If you have any questions after reading all documents please contact sDiv head Marten.Winter@idiv.de.

### 2 Proposal

## 2.1 Topics

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. The project's topics should fall within one of the five research areas of <u>iDiv's biodiversity research</u> and should have strong connections to iDiv's research mission in the field of <u>Integrative Biodiversity Research</u>.

Projects should provide evidence that sufficient data and appropriate analytical tools are available or will be developed during the project to tackle novel questions. The status of data availability has to be indicated in the pre-proposal.

Besides data synthesis we also advocate for theory and conceptual synthesis of all topics related to biodiversity research. We encourage applicants to propose forward looking theory and synthesis topics and perspectives, which can pave the way for novel research themes, going beyond backward looking perspectives.

As a topical focus we also encourage projects to use synthesis research efforts, theory and methods to close or work on closing **knowledge gaps identified by IPBES** (see <a href="here">here</a> for a full list). Although tackling some of these important knowledge gaps might require full time staff the only support staff sDiv can fund in this call are student helpers, being placed at iDiv in Leipzig (see Appendix I for more information).

### 2.2 Group composition/project collaborators

The maximum number of principal investigators (PIs) is two. Each sDiv project should have at least one <u>iDiv member</u> (full & associated members are eligible) as a participant. **Please note: iDiv member is a pre-defined term and <u>is not referring</u> to every iDiv researcher (e.g. iDiv employee). iDiv are researchers from iDiv or collaborating institutes who have to apply for being iDiv members. Please read Appendix I under working group meetings how diverse teams support successful synthesis projects.** 

See Appendix I for more information on group compositional rules (i.e. for working groups).

#### 2.3 Collaboration in iDiv

In addition to including at least one iDiv member (full or associated) as a participating collaborator, we also strongly encourage including early career researchers. In working groups, a minimum of one PhD student has to be included. We encourage you to include PhD students of iDiv's graduate school yDiv if the scientific focus fits to the student expertise.

Contact sDiv head Marten Winter in finding a suitable iDiv member and/or the head of yDiv Nicole Schmerda-Schulz for finding suitable yDiv PhD students.

#### 3 **Application process**

#### 3.1 **Pre-proposal**

You are only eligible to submit a full sDiv proposal if you have been invited to do so after a successfully reviewed pre-proposal. The mandatory pre-proposal should briefly describe the project and the aims. Pre-proposals have to be submitted via an online form in the iDiv application portal before 12 March 2024 (11:59 PM CET). Decisions whether you can submit a full proposal will be made at the end of March 2024 and the feedback will be sent to you a few days after that.

The pre-proposal online form includes:

- 1. Information and status of the PIs and participants, including the supporting iDiv member.
- 2. A brief description of the planned project (no more than 750 words excluding references, usage of references is optional, no charts, no graphics, no calculations, no formatting but continuous text) including the novelty, the synthesis aspect and scientific aims, approaches (methods, used data etc.) and relevance for biodiversity - please note that due to the potential complexity of the project structure, the use of different modules does not have to be final at this stage.
- 3. A brief description how your project engages genuinely with topics and researchers from under-represented regions (if applicable).
- 4. A list of data to be used Clarify the source and availability status (e.g. available, to be mobilized, etc.) of the data you plan to use, if applicable. If data is not available, explain why.
- 5. A letter of support by the iDiv member(s) using the template provided on the sDiv website - a pre-proposal without a letter of support from an iDiv member will not be further evaluated.

- 6. A list of min. five potential reviewers for the full proposal in case of a successful pre-proposal.
- 7. The IPBES knowledge gap which the project is going to address (if applicable) including a short description

### 3.2 Full proposal

Following the invitation to submit a full proposal, it is necessary to complete the proposal template provided on the sDiv website - available after the pre-proposal deadline. Submit your full proposal including all attachments in one PDF file via the online form in the iDiv application portal by 14 June 2024 (11:59 PM CET). Check all regulations and the online form well before the submission deadline - it contains a number of questions to be filled out in order to ease processing of the application data. Final funding decisions will be made at the end of August 2024 and the feedback will be sent to you a few days after that.

#### 4 Research data management

It is required that the data owners agree to make the data and code resulting from sDiv funding publicly available. This should be achieved within three years of the final project activity, and under the least restrictive license possible.

Therefore, PIs of approved project proposals have to read and sign the <u>iDiv Data and Code</u> Sharing Policy (and send it back to the head of sDiv). iDiv's data policy follows widely accepted Open Science principles. Funded projects will receive intensive support in any necessary code and data management demands by iDiv's Integrative Biodiversity Data and Code Support Unit.

#### 5 **Budget**

The budget of the project has to be described in the full proposal only. It is restricted to a total of ~50.000,00 €. Financial resources can be requested for consumables as well as for support staff. This could include e.g. travel costs, training but also short-term contracts for scientific helpers and guests. No additional data generation or sampling e.g. field or lab work will be funded. For an overview on basic conditions of potential modules please see appendix I.

Administration of the budget will be handled by sDiv staff. Any recruitment of staff, purchasing etc must be carried out by sDiv, as administrative regulations by Leipzig University apply and the costs need to be eliqible with the DFG funding regulations. If you are asked to submit a full proposal, please clarify the budget details with the sDiv staff.

Budget calculation for working group meetings or catalysis meetings has to be done via the budget tool provided on the sDiv website. It is important to add a screenshot of the budget tool to the full proposal. For calculating rates of the scientific support staff, please see appendix I.

It is important to list all costs, define the modules and list for which year and/or for how long they apply (e.g. for support staff it is necessary to list the starting date and the number of months they will be employed).

Any financial deviations from the proposed budget of funded proposals must be discussed with the head of sDiv. Due to the uncertain and rapidly changing financial situation, we will attempt to assist with budget discrepancies. Please note that we cannot save money in one year and shift it to other years!

Please note that funding is subject to a successful approval of iDiv funding beyond the DFG funding.

#### 6 **Evaluation procedure**

#### 6.1 Selection criteria

Generally, selection criteria are based on scientific excellence, the relevance and the novelty of the research questions, a strategic fit to iDiv research (please read carefully the sDiv framework), work plan (timeline, deliverables etc.), expertise and suitability of the project participants and the PIs. The project's objectives have to be highly relevant to iDiv's central missions.

#### 6.2 **Proposal evaluation**

Pre-proposals will be evaluated at the end of March 2024 by the sDiv board. The feedback will be sent to you a few days after that.

Full proposals are evaluated at the end of August 2024 by the sDiv board and external expert reviewers. The feedback will be sent to you a few days after that.

#### 7 Reporting

The PIs of funded synthesis projects are obliged to provide a summary of every deliverable or milestone immediately afterwards. Furthermore, it is expected that a final report will be delivered within six months after the end of the project. All reports will be published on the individual sDiv project webpages.

The report should include specific project deliverables: i.e. manuscripts of multi-author scientific publications, proposals for other funding sources, code, databases etc. It should also include a description of further collaboration plans. sDiv support has to be

acknowledged in any kind of sDiv project publication/outcome (see guidelines). Copies of published products should be sent to sDiv.

Failure to follow the sDiv rules & regulations for unjustified reasons and non-compliance with iDiv's data policy can result in banning PIs from submitting future proposals to project calls.

# Appendix I - Description of potential main project modules (Please these rules carefully. Violations can lead to an exclusion from evaluation process)

### Scientific support staff

Scientific support staff must be enrolled at a German University during the time of the contract as bachelor/master students or PhD students. Working time is 19 hours per week maximum, average costs 1.500 € per month. The workplace is the iDiv headquarters in Leipzig. sDiv helps you to find a suitable person when you have no one in mind. The recruitment process (without the search) takes up to 6 weeks. If a person is to start at the beginning of a new year, the process should start in October of the previous year. Any proposed deviation from these circumstances needs to be well justified and described and will be considered with regard to feasibility.

### Short-term guests

If a guest exchange among the collaborators (i.e. short-term visits) is considered, the iDiv member (full or associated) has to be involved. Either the iDiv collaborator is traveling or the hosting visitor(s). Funds can be requested to cover expenses of the visit(s), (e.g. travel and housing). Any necessary access to iDiv should be clarified in advance.

## Working group meetings

All in-person working group meetings should take place at iDiv in Leipzig. Please check our sDiv calendar for available dates. The following instructions are general recommendations for sDiv working groups. However, in this call working groups can be more flexible in size and duration according to the needs of the project. Group size can range from two to max. 20 participants. From our long experience, working groups of 12-15 are the optimal size for manageable and successful synthesis groups. In general, longer stays are considered more effective but costs should be balanced by a smaller group size to stay within the funding limit. We encourage working groups to meet three times, with at best four or five full days per meeting. If the main project module is large working group meetings, an approval for a funded third meeting will be based on a mid-term evaluation by the sDiv head after the second meeting. In-person meetings will take place in Leipzig. If hybrid or full in-person meetings cannot take place, sDiv working groups are supposed to meet virtually with full support by sDiv. In exceptional cases and if well justified, sDiv could also support satellite working group meetings (e.g. two teams are gathered at two places - one of them has to be iDiv - and meet simultaneously).

The PIs are responsible for communicating with sDiv. It is expected that the PIs provide a list of all participants (including themselves) who have agreed to participate (if large working group meetings are considered, a list of ten core participants is sufficient). Once a working group has been approved, exchanges or the additions of new participants can be allowed if agreed with the Head of sDiv and the PIs.

Following the spirit of iDiv and the science about successful synthesis groups, PIs should strive for a well-balanced group of participants in terms of gender balance, career stage, international and scientific expertise diversity. sDiv aims to have at least 40% female participation as well as at least one PhD student at meetings. We strongly encourage you to include PhD students of iDiv's graduate school yDiv if the scientific focus fits to the student expertise (for help with finding the right yDiv student, please contact the Head of sDiv). Please note again the encouragement towards under-represented regions (see list here), which should be also visible in the group composition (if applicable). Successful groups consist of people with excellent expertise but also with dedication and time to participate in the meetings and to contribute significantly to the working group goals. To maximize the integration of sDiv into iDiv's research, every sDiv working group needs to have a minimum of one iDiv member (full or associated) as a participant (please note an iDiv member is a specific group of elected colleagues and not every iDiv employee). It is obligatory to attach a letter of support of the iDiv member(s) to the proposal. A pre-proposal without an iDiv member agreeing to be a participant will not be further evaluated.

The admission criteria will also include the group composition, the participants' particular competences, their contribution to maximize complementarity of skills within a meeting and available funding. The participants should reflect the goals and objectives of the group, for example, working groups that address socio-economic aspects of biodiversity science should involve stakeholders and social scientists.

Working groups should include internationally renowned scientists across career stages, we ask the PIs to minimize the carbon footprint of travel as much as possible. Therefore, no more than 50% of the participants should travel from outside geographical Europe.

## **Catalysis** meeting

This is a new module for sDiv. If you have questions about this activity please contact sDiv head Marten.Winter@idiv.de .

These one-time meetings can bring together up to 25 scientists with different research and non-research backgrounds to focus on a major question or research area in biodiversity related to synthesis, theory and iDiv's research mission (rules for group composition and necessary diversity are the same as for working groups, see above). Catalysis meetings are intended to be used to:

- focus on a theme that is grand enough to excite and inspire,
- foster discussions leading to new synthesis research questions and/or themes
- identify classes of primary data (if synthesis is data driven) that must be collected before synthesis is possible,
- initiate a dialogue across disciplinary boundaries,
- to facilitate the assembly of scientific networks

This meeting should have as all other sDiv funded activities a strong iDiv participation and can cost up to 25k€ (including all costs). Please use our <u>budget tool</u> to calculate your costs.



Possible outcomes could be grant proposals which are planned to bring funding to iDiv, peer-reviewed publications etc.

sDiv does not fund one-time meetings whose sole purpose is to prepare or produce, for example, grant proposals to fund activities purely outside the iDiv consortium.

As an important part of the improvement of sDiv and the development of synthesis centres, working groups and catalysis meetings are evaluated before, during and after the meeting(s). Every meeting participant is asked to answer the evaluation survey(s) after the meeting(s).