




CESAB
CENTRE FOR THE SYNTHESIS AND ANALYSIS
OF BIODIVERSITY

sDiv | synthesis centre of  **iDiv**

Joint Call CESAB-sDiv SYNERGY

Coexistence and stability in high-diversity communities

Contact

cesab@fondationbiodiversite.fr

CESAB and sDiv are instruments of the French FRB (Foundation for Research on Biodiversity) and German iDiv (German Centre for Integrative Biodiversity Research Halle-Jena-Leipzig). These two centers offer a place and some time to host groups of researchers for a better use of existing data, information and knowledge to foster theoretical and synthetic thinking in biodiversity research. In 2019 they propose a joint call called “synergy” to fund two theory driven groups of 5-7 international researchers that will share their meetings between the two centers.

The main topic of the call will be “Coexistence and stability in high-diversity communities”. Modern coexistence theory provides a useful framework for understanding the coexistence of dominant species, but is limited to few interacting species, and is not predictive or extendable to novel or real setting contexts. This joint call aims at fostering a synthesis to understand coexistence and stability in typical high-diversity communities that are often composed of relatively few dominant species and many low-abundance species. Such a focus could include new theories, methods of data collection and analysis. Modeling approaches, both mechanistic and statistical, could be novel or extend existing frameworks. Understanding the consequences of global change as a driver of diversity change would be a desirable applied outcome.

Two groups of 5-7 researchers will be funded for four meetings each. They will have two joint meetings (one at the beginning and one at the end) to foster synergies and complementarities between groups and work plans. The first joint meeting will be organized at CESAB and the final joint meeting at sDiv. The two other individual meetings will be organized either at CESAB or sDiv (depending on the composition of the groups and availability of resources at the centres). One of the two PI’s of each group must be associated with a French research institute or with iDiv (the German Centre for Integrative Biodiversity Research).

Working group composition: PIs should strive for a well-balanced group of participants in terms of gender, career stage, internationality and expertise diversity. 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 availability of early results during the limited timeframe of a meeting typically boosts the intellectual progress.

Working group outcomes are expected to be multi-author high-quality and ideally high-impact scientific publications. Existing and new concepts, theories, approaches to data exploration, modelling and synthesis (including conceptual synthesis) can be discussed and developed with a strong and direct link to existing approaches and fostering predictive biodiversity theory, either directly or indirectly.

The financial support includes transport, accommodation and catering care of all local arrangements and reimbursement for travel and lodging for the four meetings of the working group.

Administration of the budget will be handled by the CESAB and sDiv staff.

Pre-Proposal: You will be able to submit a full proposal only if you are invited to after a positively reviewed pre-proposal. Whether you can submit a full proposal will be decided by the sDiv and CESAB scientific boards within two weeks following the pre-proposal deadline. The pre-proposal includes: (a) Information about the PIs. (b) A brief description of the aims, scope and scientific objectives of the planned project, its approach, and its synthesis aspect. (c) A list of researchers who have agreed to participate.

Full-Proposal: Complete template for the full proposal will be provided after evaluation of the pre-proposal.

Contact:

cesab@fondationbiodiversite.fr

<http://www.fondationbiodiversite.fr>

Calendar:

Pre-Proposal deadline: **September 4th**

Invitation to submit a full-proposal by **September 27th**

Full-proposal deadline: **November 15th**

Final decision will be made early **January 2020**

First Meeting in 2020

About sDiv – Synthesis Centre of iDiv

sDiv is the Synthesis Centre for Biodiversity Sciences, embedded in the active research environment of iDiv, a research centre funded by the German Research Foundation. The synthesis centre is an incubator for new ideas – a think tank and place of inherent horizon scanning. Scientific synthesis integrates diverse knowledge to increase the generality and applicability of results and yield novel insights or explanations. It can bring together existing but disparate data, methods, theories, and tools in new and perhaps unexpected ways. Synthesis is a highly varied effort, and its definition will change depending upon the lens of those who undertake it. Synthesis is a means for accelerating scientific understanding that is applicable across multiple places and scales. In biodiversity research, scientific synthesis is what makes it possible to find patterns, answers and solutions to some of the major questions facing science and society.

<https://www.idiv.de/sdiv.html>

About CESAB – Centre for the Synthesis and Analysis of Biodiversity of FRB

CESAB is a key program of the FRB and aims to implement innovative work to synthesize and analyze already existing data in the field of biodiversity research. Launched in 2010 after the "Grenelle de l'Environnement" by the Ministries for research and for ecology, it was created by eight public research institutions (BRGM, CIRAD, CNRS, IFREMER, INRA, IRD, IRSTEA and MNHN), joined in 2014 by LVMH and in 2017 by the University of Montpellier. Researchers can find at CESAB the necessary means and infrastructure to share and enhance existing information, and to conduct analyses that address major scientific challenges in biodiversity research. Advancing knowledge, developing synthesis research and collaboration, facilitating the links between all scientific disciplines: these are the main assets of CESAB which host a large number of researchers every year from all the continents, during work sessions spread over the project timeline.

<http://www.fondationbiodiversite.fr/la-frb-en-action/programmes-et-projets/le-cesab/>