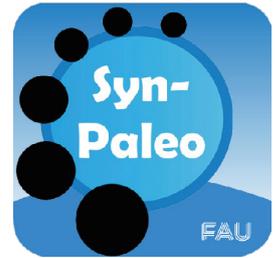


PaleoSynthesis

Newsletter 08/2022



Funded by the Volkswagen Foundation

Prof. W. Kiessling (FAU, Erlangen)

Prof. M. Steinbauer (University Bayreuth)



visit our homepage!

<https://www.paleosynthesis.nat.fau.de/>

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@PaleoSynth



paleosynthesisproject

☀ Summer greetings ☀

Quite some time has passed since our Christmas newsletter, and we would like to bring you up to date on the project. In the spring we could finally hold the first workshop – still hybrid – in Erlangen. DDCP invited to two open surveys, and we published the calls for a new postdoc and applications for future workshops. Also, young scientists were invited to apply for a place in this years the Analytical Paleobiology Workshop.

Workshop updates

At present, workshops from our first call are ongoing and several are moving towards the phase where manuscripts are submitted.



BioDeepTime

At the end of March many of the BioDeepTime members met in Erlangen for a 4-days-workshop. Everybody was excited that after the long Covid-break an in-person meeting was possible.

Since a few members couldn't join in person, the workshop was held as a hybrid. Participants gave brief talks on their specific topics within BioDeepTime followed by intensive discussion in the group. Through discussion and break-out groups the BioDeepTime team made great progress and gathered new ideas. In the time since the workshop, the team has continued to meet regularly to discuss data integration. The first version of the database will be presented at the Geological Society of America conference later this year in Denver, USA.

Diversity Dynamics and Crisis in Paleontology



Following the successful speaker series, the DDCP team conducted a survey to find out what kinds of improvements could be made for such series. Overall the feedback was very positive and it turned out that there are many more topics that would be of interest for the

community. As a next step, the DDCP team is finalizing a community survey for distribution in the coming months. The data collected from this survey will be used to identify the types of collaboration present in the field and how individuals' identities influence collaborative practices in paleontology. We will distribute this survey through the PaleoSynthesis listserv and invite you to complete the survey to submit recommendations on how to carry out collaborations in the field and help to compile a set of guidelines. Your feedback is crucial to analyze the current situation and to work on improvements.



PaleoNovelty

The PaleoNovelty manuscript is nearing completion as the team works to provide a broad overview of the topic that will be relevant in both paleoecology and restoration ecology. The authors aim to submit the manuscript within the next couple of weeks.



New workshops in PaleoSynthesis

Earlier this year, we published a call for new workshops and the PI's together with the scientific advisory board have made their decision.

We received very good workshop applications and the Scientific Advisory Board together with the PaleoSynthesis PI's Wolfgang Kiessling and Manuel Stein-

bauer have decided on the funding of two. Both have great potential in bringing forward paleontology and for developing new and modern approaches and collaborations.

The first workshop proposal approved is **BITE - Biotic Interactions in Time** by Devapriya Chattopadhyay (IIS-ER Pune, Department of Earth and Climate Science) and Aleksandra Skawina (University of Warsaw). The workshop is based on the statement that “Biotic interaction plays an important role in the evolution of groups through time.” The main goal is to develop a database that is standardized and therefore allows researchers to quantitatively evaluate the relative role of abiotic and biotic drivers of evolution through time. This, according to the PI’s will also contribute to conservation efforts by predicting future changes in biotic interactions in relationship to diversity and climatic fluctuations based on a reliable deep-time record of biotic interaction.

The second funded workshop is **IRAL - Integrated Record of Ancient Life** (Big Data framework for the next gen-

eration of data infrastructure in paleontological research). The PI’s for this workshop are Adam T. Kocsis (FAU) and Emma Dunne (FAU). Multiple databases exist, each focusing on specific domains of paleontological research. Even as current analyses attempt to cross the boundaries of traditional disciplines. Unifying the data in a single, Big Data framework can open new dimensions of paleontological research and more equitable global cooperation. Such a new ‘data lake’ can transcend previous design choices and allow a wider spectrum of data registration, while allowing the integration, access, and curation of previously accumulated data over the next 25+ years.

The ongoing ‘BioDeepTime’ PaleoSynthesis project represents the first major effort to merge many of the disparate paleontological databases, with the aim to study time series of fossil assemblages. IRAL will build on previous experiences from this workshop. Also, IRAL workshops will operate in synergy with the BITE project by an overlap of members can form an important bridge between both projects - and to create a common structure.



Big Questions

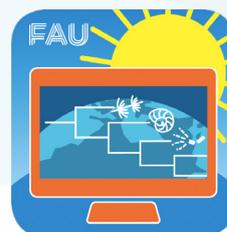
As an offshoot of the Big Questions project, members of the conservation paleobiology working group conducted a community survey and literature review to evaluate the development of the field of conservation paleobiology during the last twenty years. After reviewing more than 500 papers and processing almost 200 survey responses, the team will submit a manuscript this month to the “Integrating Conservation Biology and Paleobiology to Manage Biodiversity and Ecosystems in a Changing World” Research Topic with *Frontiers in Ecology and Evolution*.

In addition, the individual working groups are currently focussing on revising their questions and writing descriptive text for their specific working group. As this process continues, Jansen is working to compile a cohesive draft of a manuscript. With twelve working groups and nearly 200 participants, the project is moving forward incrementally.



App development

After troubleshooting with the Apple app-store, a preliminary version of FossilDiscovery is available now and tested by invited users to eliminate bugs and errors. Android users can download the app in the playstore already.



APW 2022

The evaluation board has decided on the candidates that are invited for the APW 2022 in Erlangen. We had nearly 70 applications from students all over the world and more than 20 nationalities. Unfortunately, we could only choose 12 participants. The school takes place from August 22 to September 9 and will be conducted by own staff and external lecturers, covering a series of topic.



New PostDoc

Along with the call for workshop proposals, we called for applications for our next PostDoc to support the PaleoSynthesis project. We received many good applications and, after receiving the candidates, the PI’s and the scientific advisory board decided to offer Dr [Elizabeth M. Dowding](#) (Australia, currently University of Oslo) the position. We are very happy that Liz will be member of the team for the next two years starting in November.

For a smooth transition, the current postdoc (Jansen) will stay in the team until end of November.

☀️ **Have a great summer!** ☀️