

# **NOW 25th Anniversary Meeting**

Sabadell (Barcelona), 16–18 November 2022

Organized by the Institut Català de Paleontologia Miquel Crusafont (ICP)

## **SECOND CIRCULAR**









### Organizing committee

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Christine M. Janis (University of Bristol, Brown University)
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Pasquale Raia (Università degli Studi di Napoli Federico II)
Juha Saarinen (University of Helsinki)
Lars W. Van den Hoek Ostende (Naturalis Biodiversity Center)
Indré Žliobaité (University of Helsinki)

#### **Sponsors**



#### Introduction

The NOW database of fossil mammals (<a href="https://nowdatabase.org/">https://nowdatabase.org/</a>) started as a small joint initiative of a few researchers in 1996 but over three decades it has grown and evolved into a thriving community including mammal paleontologists from all over the world. NOW, initially set to include only data of Neogene mammals from the Old World, has turned global in scope and nowadays includes data for Cenozoic mammals worldwide. A lot has changed since 1996, yet the spirit, illusion, and ideals that promoted its creation are still there and have succeed in engaging new generations of paleontologists.

We have NOW for years to come, but 25 years is quite a respectable age for a database and this requires a celebration. Therefore, after one year delay because of the pandemic, it is our pleasure to invite you to the **NOW 25**<sup>th</sup> anniversary meeting to be held in Sabadell (Barcelona, Spain) in November 16–18<sup>th</sup> 2022. Please note this is not an event reserved to NOW contributors, everyone is invited!

#### Venue

The NOW 25<sup>th</sup> Anniversary Meeting will be **fully face-to-face** and held at the *Espai Cultura Fundació* 1859 Caixa Sabadell (https://www.fundaciosabadell.cat/en/fundacio-1859-caixa-sabadell/), which is in the Sabadell city center, just a few meters away from the ICP museum. The *Espai Cultura* is an ancient modernist style building by renowned architect Jeroni Martorell surrounded by nice gardens. It is equipped with a large modern auditorium and several smaller meeting rooms. Catering for coffee-breaks and lunch is included.



#### **Dates and deadlines**

Registration, payment, and abstract submission deadline: September the 30th.

## **Registration information and prices**

Regular: 120 €

Student: 60 €

Registration price is **120 euros** and includes attendance to the meeting, lunch and coffee breaks during the 16<sup>th</sup> and the 17<sup>th</sup> at *Espai Cultura Fundació 1859 Caixa Sabadell*. **Field trip expenses**, including celebration lunch and visit to the *Finca Batllori* cellar, **are also included in the price**.

**Student price:** Degree and master students, as well as PhD candidates and early postdocs (up to after 2 years of PhD completion) have a **discount rate of 50%** over the registration price thanks to sponsorship by Ajuntament de Subirats.

Click here to fill in the registration form: <a href="https://form.jotform.com/221942466411352">https://form.jotform.com/221942466411352</a>

## Presentations, abstract submission, and publication

For the NOW 25<sup>th</sup> Anniversary Meeting contributions will be restricted to **oral presentations only**. Oral presentations are scheduled for 15 minutes duration including a few minutes for questions. Contributors should check the different thematic sessions (see below) and **indicate in the registration form in which session they would prefer to feature their work**. If you are unsure which session suits better your contribution, please contact us at <a href="mailto:now25@icp.cat">now25@icp.cat</a>. If several presentations not fitting any symposium are received, an open theme session may be included in the program.

**Extended abstracts will be peer-reviewed and published in a special issue of the journal** *Paleontologia i Evolució* published by the ICP. Abstracts can be up to 500 words long and include 1 figure (color or grayscale) and up to 5 references. **Abstract formatting template** is available for download here: <a href="https://www.icp.cat/attachments/cursos/NOW25">https://www.icp.cat/attachments/cursos/NOW25</a> Conference Abstracte Template.d <a href="https://www.icp.cat/attachments/cursos/NOW25">ocx</a>. Please use it! Abstracts not following the template style will be returned to the authors. **Abstracts can be submitted through the registration form**. The abstract volume, including the fieldtrip guide, will be available shortly before the meeting.

## How to arrive to Sabadell and suggestions for accommodation

Sabadell is one of the largest cities in Catalonia and is located just 20 km north of Barcelona. Historically an important industrial center it is well communicated by road and railway with Barcelona. To arrive to Sabadell from the Barcelona-El Prat Airport the best option is to take the Aerobus (A1 or A2; check departure times here: https://www.barcelona-aerobus-tickets.com/barcelona-aerobus-timetable/) to the center of Barcelona (Plaça Catalunya). Once at Plaça Catalunya go to central station to take the train to Sabadell. You may take Ferrocarrils de la Generalitat de Catalunya (line S2; check departure times here: https://www.fgc.cat/en/fgc-network/l-barcelonavalles/en-lines-and-schedule-barcelona-valles-s2-barcelona-placa-catalunya-sabadell/) or Rodalies de Catalunya (RENFE line R4; check departure times here: https://www.renfe.com/es/en/suburban/rodalies-catalunya/timetables). companies have frequent trains (one each 15 or 30 minutes) that will take you directly to the Sabadell city center (Sabadell Plaça Major station). Travelling time from Plaça Catalunya to Sabadell ranges between 40 and 50 minutes depending on the company you use. The whole trip from the airport to Sabadell city center should take one and a half to two hours.

The city center and the area close to the meeting place and ICP museum is the commercial center of Sabadell and is full of restaurants, bars and shops. Furthermore, there is a good number of emblematic modernist style buildings here and there, including the *Espai Cultura Fundació 1859 Caixa Sabadell*, where the meeting sessions will be held.

Sabadell has a wide offer of accommodation options from hotels to touristic apartments. Find below a **suggestion of hotels** which are located close to the venue.

#### **HOTEL URPÍ**

Address: Carrer de Sant Maties, 5, 08208 Sabadell, Barcelona

Phone: +34 937 24 40 00

Email: hotel@hotelurpi.com

Web: https://hotelurpi.com/en/

#### **URBAN SABADELL**

Address: Ronda de Zamenhof, 21, 08201 Sabadell, Barcelona

Phone: +34 689 04 32 79

Web: <a href="https://urbansabadell.com/en/">https://urbansabadell.com/en/</a>

#### **HOTEL CATALONIA**

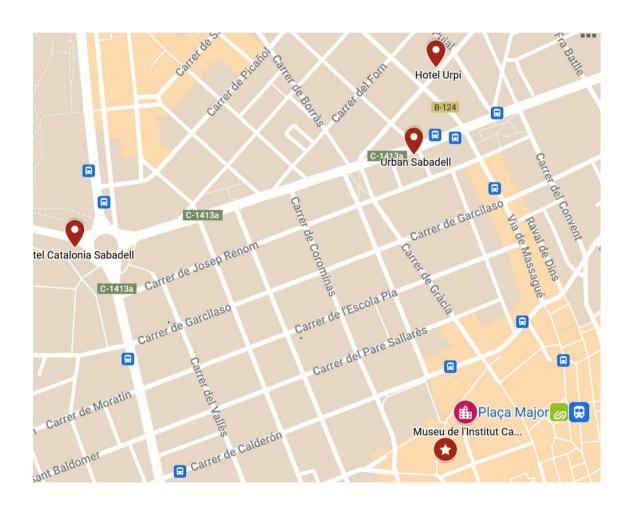
Address: Plaça de Catalunya, 10-12, 08206, Sabadell

Phone: +34 93 727 92 00

Web: https://www.cataloniahotels.com/en/hotel/catalonia-sabadell

## Map with hotels situation, ICP museum and Meeting Place:

https://www.google.com/maps/d/u/0/edit?mid=1vdeP 4Y9hQ4GfkK9VEmPZOaGCbA P7Og&usp=sharing



## **Provisional program**

The NOW 25<sup>th</sup> Anniversary Meeting will include two days of talks and discussions plus a third day of fieldtrip. Additional activities, such as guided tour to the ICP museum, are also included. All talks will be held at *Espai Cultura Fundació 1859 Caixa Sabadell*. There will be five **thematic sessions** devoted to different topics ranging from systematics and biochronology to paleobiogeography, paleobiodiversity, and ecometrics. In addition, there will be two **keynote lectures**, the first one by **Mikael Fortelius** (U. Helsinki), the founder and driving force behind the NOW for many years; and the second one by **Indrė Žliobaitė** (U. Helsinki), the current NOW general coordinator.

#### **Preliminary schedule:**

Day/hour	16	17	18
9:00-09:30	Welcome: Alba	Keynote: Žliobaitė	
09:30–10:00	Keynote: Fortelius		Bus travel from Sabadell to Subirats
10:00–10:30	Systematics & Biochronology [Ch. Van den Hoek Ostende]	Ecometrics & Paleoecology [Ch. Saarinen]	Stop 1: Basin panoramic view
10:30-11:00	Coffee break	Coffee break	Stop 2: Els Casots
11:00-11:30	Systematics &	Ecometrics &	fossil site
11:30-12:00	Biochronology [Ch. Van	Paleoecology [Ch.	Visit to Caves
12:00-12:30	den Hoek Ostende]	Saarinen]	Olivé i Batllori
12:30-13:00			
13:00-13:30	Lunch	Lunch	Lunch
13:30-14:00			
14:00-14:30			
14:30–15:00	Paleobiogeography & Paleobiodiversity [Ch.	Vallès-Penedès Record / Open Session [Ch.	Stop 3: Can Sala coral reef
15:00–15:30	Raia]	Casanovas]	Bus travel from Subirats to Hostalets de Pierola
15:30-16:00			Stop 4: Can Mata
16:00-16:30	Coffee Break	Coffee Break	fossil sites
16:30-17:00	Paleobiogeography &	Data management,	Bus travel from
17:00–17:30	Paleobiodiversity [Ch. Raia]	development & expansions of NOW [Ch. Lintulaakso]	Hostalets de Pierola to Sabadell
17:30–18:00			
18:00-18:30		Visit to the ICP museum	
18:30–19:00			

#### **Keynotes:**

*NOW as it happened: The first decades.* Mikael Fortelius, NOW co-founder and honorary member, University of Helsinki (Finland)

Teeth, limits and NOW. Indrė Žliobaitė, NOW general coordinator, University of Helsinki (Finland)

#### Thematic sessions:

The times they are a changin'

Wednesday 16<sup>th</sup>, 10:00-13:00

Chair: Lars W. Van den Hoek Ostende, Naturalis Biodiversity Center (Leiden, the Netherlands)

Data are not stationary. Our advancing insights on phylogenies and chronology have to keep database managers on their toes. What are the latest developments in the dating and correlation of localities? Which new systematics require attention? And how can the NOW database help in improving our understanding of both systematics and chronology?

New avenues for incredibly old travelers: Modern-day paleobiogeography and paleobiodiversity research and future directions

Wednesday 16<sup>th</sup>, 14:30–18:00

Chair: Pasquale Raia, Università degli Studi di Napoli Federico II (Naples, Italy)

Macroevolution is a classic topic in paleontological research. Although most macroevolution traditionally focused on diversity counts and patterns of phenotypic changes across clades, the advent of phylogenetic comparative methods revolutionized the field in the last few years, and the application of species distribution modeling techniques, the ever-increasing availability of detailed paleoclimatic data, and paleogenomics are all bringing about new whirls. This session's theme is about the state of the art of these new fields within the macroevolution discipline, and what is expected to come next.

Ecometric and paleoecological research based on the NOW database – Novel research questions, data and methods to unravel large-scale climate, paleoenvironments and biotic patterns

Thursday 17<sup>th</sup>, 10:00-13:00

Chair: Juha Saarinen, University of Helsinki (Helsinki, Finland)

Research on the paleoecology and ecometrics of fossil mammals and their communities have developed vastly over the last few decades, with several new methodological developments and rapidly accumulating data. Ecometric and paleoecological data, such as dental ecometric traits and body mass estimates, are among the key elements being added to the NOW database. In this session, we will have a look at new and innovative ecometric and paleoecological research that has used NOW data or data to be added to the NOW-database to resolve important questions about climate, paleoenvironments and biotic interactions worldwide during the Cenozoic.

The Vallès-Penedès Basin: A high-resolution continental record of Miocene climatic and biotic dynamics

Thursday 17th, 14:30-16:00

Chair: Isaac Casanovas-Vilar, Institut Català de Paleontologia Miquel Crusafont (Sabadell, Spain)

The Vallès-Penedès Basin (Catalonia, Spain) is one of the richest and more continuous continental Miocene records in Eurasia. After over 100 years of study hundreds of different fossil sites are known and most of these have been dated with high accuracy. This allows for detailed evolutionary paleoecology studies focusing on faunal turnovers to test the influence of biotic and abiotic factors on the evolution of terrestrial ecosystems. In this session we present recent studies on the Vallès-Penedès record and introduce a customized, specimen-level, database for paleobiodiversity dynamics analyses further discussing its connections with the NOW database.

Data Management, Development, and Expansions of NOW

Thursday 17th, 16:30-18:00

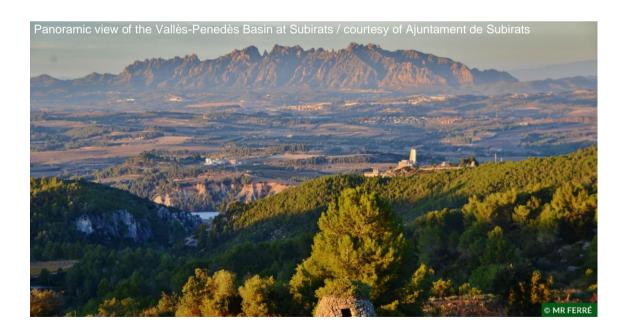
Chair: Kari Lintulaakso, Finish Museum of Natural History LUOMUS (Helsinki, Finland)

The NOW database celebrates its 25th year as an online database for paleontological research. New data are constantly added to the database and new expansions are steadily added as well. In this session, we get our hands dirty, roll our sleeves up and go through the latest development of the NOW and discuss the future requirements, threats, and opportunities to keep NOW as a vital tool for paleontological research for at least another 25 years.

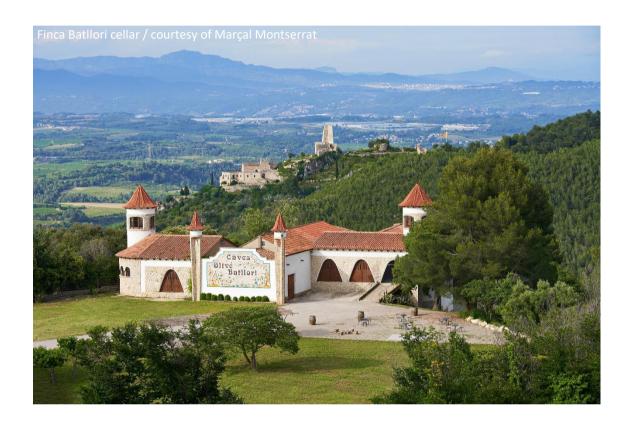
## Field trip to the Vallès-Penedès Basin

The NOW 25<sup>th</sup> Anniversary Meeting will include one-day field trip to the Vallès-Penedès Basin on Friday the 18<sup>th</sup>. The Vallès-Penedès Basin stands out as **one of the densest and more continuous Miocene terrestrial records in Eurasia**, including hundreds of vertebrate fossil sites that have yielded tens of thousands of specimens. The basin is well known for being the type area for the Vallesian (Late Miocene) European mammal age as well as for several reference localities such as Can Llobateres. A bus will take all participants from Sabadell city center and bring them back there after the tour.

In this field trip we will get an overview of the basin structure and sedimentary record focusing in two well-represented critical intervals: the Miocene Climatic Optimum (MCO; ~17-15 Ma) and the Middle/Late Miocene transition (~12.5-11 Ma). The MCO is particularly well represented in the Penedès sector of the basin, near the town of Subirats, where we will visit els Casots site, which dates to 16 Ma and corresponds to an ancient wetland housing a remarkable diversity of vertebrate species. Nearby we will have a look at the Can Sala coral reef, which was formed at the height of the MCO, when the sea level rose to flood part of the basin. In the afternoon we will visit the Abocador de Can Mata set of sites, discovered during the building of a landfill at els Hostalets de Pierola. Since 2002 paleontologists have worked almost continuously in Can Mata surveilling the heavy machinery digging activity and thus allowing for a huge sampling effort. These has allowed for the recovery of tens of thousands of remains including rare faunal elements such as hominoid and pliopithecoid primates. The more than 200 localities known from the Can Mata composite sequence have been accurately dated and provide a unique opportunity to study climatic and faunal evolution during the Middle/Late Miocene transition.



The field trip will also include several social activities, including a celebration lunch and a visit to caves Finca Batllori in Subirats. Cava is a sparkling wine which is mostly produced in the Penedès area of Catalonia. Finca Batllori is a renowned cellar that has been producing high-quality wines and caves since the XVII<sup>th</sup> century (more information here: <a href="https://fincabatllori.com/en/">https://fincabatllori.com/en/</a>). The visit will show the modernist cellar, the traditional process to elaborate cava and will include a taste of their products.



#### Consult the ICP collections

The ICP collection stands out as one of the most important collections of fossil vertebrates in Spain. As far as mammals are concerned, it is well known for housing several types and the huge collection of the Vallès-Penedès Basin, which comprises over 100,000 specimens. However, there is material from other localities from all over Spain as well as from southern France and northern Africa. If you want to take the chance to consult the ICP collections please fill in the collection request form (https://www.icp.cat/attachments/collections/Collections inquiry form ICP.docx) and sent it to our collection manager Josep M. Robles (josep.robles@icp.cat). ICP collection policies be consulted inquiry can here https://www.icp.cat/attachments/collections/Collections inquiry policies ICP.pdf. Please note that locating and preparing the material for study requires some time so please send your request as soon as possible and be as specific as you can (i.e., indicating taxa, localities and, if possible, collection numbers).

#### For more information

Please consult the meeting webpage (<a href="https://www.icp.cat/index.php/en/activities/congressos/congressos-futurs">https://www.icp.cat/index.php/en/activities/congressos/congressos-futurs</a>) or write to <a href="mailto:now25@icp.cat">now25@icp.cat</a>.