

## **NOW 25th Anniversary Meeting**

Sabadell (Barcelona), 16–18 November 2022

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

## **PROGRAM**









#### **Organizing committee**

Isaac Casanovas-Vilar David M. Alba David Basanta Pere Figuerola

#### Scientific committee

David M. Alba (ICP)
Júlia Arias-Martorell (ICP)
Isaac Casanovas-Vilar (ICP)
Marc Furió (Universitat Autònoma de
Barcelona & ICP)

Christine M. Janis (University of Bristol, Brown University)
Kari Lintulaakso (Finish Museum of Natural History LUOMUS)
Àngel H. Luján (ICP)
Raquel Moya-Costa (ICP)
Pasquale Raia (Università degli Studi di Napoli Federico II)
Juha Saarinen (University of Helsinki)
Lars W. Van den Hoek Ostende (Naturalis Biodiversity Center)
Indré Žliobaitė (University of Helsinki)

Part of R+D+I project PID2020-117289GBI00





#### **Sponsors**













### Program at a glance:

	Wednesday 16	Thursday 17	Friday 18
09:00-09:15	REGISTRATION	Žliobaitė	Bus travel from Sabadell to Subirats
09:15-09:30			
09:30-09:45	Welcome		
09:45-10:00	Fortelius		
10:00-10:15		Foister	Stop 1: Castell de Subirats
10:15-10:30		Janis	
10:30-10:45		Saarinen	Stop 2: Casots fossil site
10:45-11:00	Aiglstorfer	Samuels	
11:00-11:15	COFFE BREAK	COFFE BREAK	
11:15-11:30			
11:30-11:45	Bilgin	Sanisidro	Visit Caves Olivé i Batllori
11:45-12:00	Kordos	Wilson	
12:00-12:15	Moya-Costa	Hopkins	
12:15-12:30	Agustí	Parker	
12:30-12:45	Sinitsa	Alba	
12:45-13:00	Skandalos	Arranz	
13:00-13:15	LUNCH	LUNCH	LUNCH
13:15-13:30			
13:30-13:45			
13:45-14:00			
14:00-14:15	Van Dam	McKenzie	
14:15-14:30	Van der Made	Navarro	
		Cascalló	
14:30-14:45	Pushkina	Aiglstorfer	
14:45-15:00	Benevento	Barry	
15:00-15:15	Bernor	Belmaker	Stop 3: Can Sala Coral Reef
15:15-15:30	Cailleux	Sánchez López	
15:30-15:45	COFFE BREAK	COFFE BREAK	Bus travel from Subirats to Hostalets de
15:45-16:00			Pierola
16:00-16:15	Flynn	Talavaara	
16:15-16:30	Liu	Lintulaakso	
16:30-16:45	Mennecart	DISCUSSION	Stop 4: Can Mata fossil sites
16:45-17:00	Braumuller		
17:00-17:15		CLOSURE	
17:15-17:30		Modernist	
17:30-17:45		tour Sabadell	bus travel from Hostalets de Pierola to
17:45-18:00			Sabadell
18:00-18:15			
18:15-18:30			
18:30-18:45		Beer at the ICP	
18:45-19:00		museum	
19:00-19:15			
19:15-19:30			

#### **Detailed program**

#### **INVITED KEYNOTES:**

Wednesday 16th, 09:45-10:45

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

Thursday 17<sup>th</sup>, 09:00-10:00

**Indrė Žliobaitė**, NOW general coordinator, University of Helsinki (Finland). *Teeth, limits and NOW: What can we expect from the Red Queens perspective* 

#### **THEMATIC SESSIONS:**

Oral communications, bold font indicates presenting author.

#### The times they are a changin': Systematics and biochronology

Wednesday 16<sup>th</sup>, 10:45-14:45

Chair: Manuela Aiglstorfer, Naturhistorisches Museum Mainz/Landessammlung für Naturkunde Rheinland-Pfalz (Mainz, Germany)

- 10:45 **Aiglstorfer, M.**, Lischewsky, B., Grimm, K., & Grimm, M. Eppelsheim—A key site for mammalian paleontology revisited
- 11:30 **Bilgin, M.**, Joniak, P., Mayda, S., Peláez-Campomanes, P., Göktaş, F., & van den Hoek Ostende, L. W. Updated Early Miocene biochronology of Anatolia
- 11:45 Kordos, L., & Mészáros, I. Late Miocene habitat changes in the same section at Alsótelekes close to Rudabánya (NE Hungary)
- 12:00 Moya-Costa, R., Cuenca-Bescós, G., & Rofes, J. The soricids (Eulipotyphla, Mammalia) of Gran Dolina (Early– Middle Pleistocene, N Spain): Systematics and biochronological implications
- 12:15 Piñero, P., Martín-Perea, D. M., Sevilla, P., **Agustí, J.**, Blain, H.-A., Furió, M., Laplana, C. La Piquera: A new early Ruscinian karstic site from central Spain
- 12:30 **Sinitsa, M. V.** Evolutionary history and dispersal of Holarctic ground squirrels (Rodentia, Xerinae, Marmotini)
- 12:45 **Skandalos, P.**, Joniak, P., & van den Hoek Ostende, L. W. Enamel free areas, the key to unlock Arvicolinae taxonomy
- 14:00 Van Dam, J. A., Mein, P., Garcés, M., van Balen, R. T., Furió, M., & Alcalá, L. Between local zones and MN units: A new inter-basinal rodent zonation for the late Neogene of Spain
- 14:15 Van der Made, J. An updated range chart for the Oligocene to recent west Eurasian Suoidea. Variation in species richness

14:30 **Pushkina**, **D**. Biochronology of the Pleistocene localities in Northern Eurasia with the emphasis on large mammals of the former USSR territories

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

Wednesday 16th, 14:45-17:00

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

- 14:45 **Benevento, G. L.**, Meijer, N., Mulch, A., & Fritz, S. Middle Eocene aridification drove a drop in Asian mammal biodiversity that preceded the Eocene—Oligocene Transition
- 15:00 **Bernor, R. L.**, Cirilli, O., & Kaya, F. Old World Equidae dispersals, evolutionary radiations, and biogeographic extensions since 11.1 Ma
- 15:15 **Cailleux, F.**, van den Hoek Ostende, L. W., Mein, P., & Joniak, P. Paleopathologies and bite marks: The last stand of the Miocene gymnure *Galerix stehlini* (Mammalia, Eulipotyphla)
- 16:00 **Flynn, L. J.,** & Morgan, M. E. Siwalik rodent relative abundances and recognition of metacommunities
- 16:15 **Liu, L.**, Galbrun, E., Tang, H., Kaakinen, A., Zhang, Z., & Žliobaitė, I. Computational ecoregions in Asia in the present and the past
- 16:30 **Mennecart, B.** The earliest ruminants from Western Europe, two different stories, two different Asiatic origins
- 16:45 Madern, A., Braumuller, Y., Mavikurt, A. C., Berwerff, L., Janssen, N., Cantalapiedra, J., Casanovas-Vilar, I., van Welzen, P. & van den Hoek Ostende, L. W. Where's dinner? Variation in carnivoran distributional responses to Vallesian faunal turnover

# 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>, 10:00-12:30

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

- 10:00 **Foister, T. I. F.**, Fortelius, M., Tallavaara, M., & Žliobaitė, I. An assessment of heterogeneity in hominin paleoecology through hypsodonty of mammalian communities
- 10:15 Janis, C. M. Asymmetry of evolutionary patterns between Old World and New World equids
- 10:30 **Saarinen, J.** Elephants and environments—new developments in understanding the evolution and ecometrics of Proboscidea during the Cenozoic

- 10:45 **Samuels, J. X.**, & Schap, J. A. Climate and habitat changes drove mammal community evolution through the Cenozoic of Oregon: Comparing community structures to paleoclimate data
- 11:30 **Sanisidro, Ó.**, Cantalapiedra, J. L., Zhang, H., Alberdi, M. T., Prado, J. L., Blanco, F. & Saarinen, J. The life history of proboscidean functional diversity
- 11:45 **Wilson, O.**, Parker, A. & Saarinen, J. Community composition scoring using a prehuman baseline: Applications for conservation, taphonomy, climate reconstruction
- 12:00 **Hopkins, S. B.** The effects of Cenozoic ecosystem change on small mammal community ecology over three continents
- 12:15 **Parker, A.**, Liu, L., Tallavaara, M., Kaakinen & Žliobaitė, I. A recommender systems approach to reconstructing mammal faunas across Pleistocene Eurasia

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

Thursday 17<sup>th</sup>, 12:30-14:30

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

- 12:30 **Alba, D. M.**, Torres, J., DeMiguel, D., Casanovas-Vilar, I. The Vallès-Penedès Miocene Vertebrates Paleobiodiversity Database
- 12:45 **Arranz, S. G.**, Casanovas-Vilar, I., Alba, D. M. Paleoenvironmental inferences on the Late Miocene hominoid-bearing site of Can Llobateres (NE Iberian Peninsula): An ecometric approach based on functional dental traits
- 14:00 McKenzie, S., Sorbelli, L., Cherin, M., Almécija, S., Pina, M., Abella, J., Luján, À.
   H., DeMiguel, D., Alba, D. M. Earliest Vallesian suid remains from Creu de Conill
   20 (Vallès-Penedès Basin, NE Iberian Peninsula)
- 14:15 **Navarro Cascalló, J.**, Abella, J., Luján, À. H., Sánchez, I. M., Casanovas-Vilar, I. Diet and habitat of *Ampelomeryx ginsburgi* (Artidactyla: Palaeomerycidae) of the Middle Miocene site of els Casots (Vallès-Penedès Basin, Catalonia)

#### Data Management, Development, and Expansions of NOW

Thursday 17<sup>th</sup>, 14:30–16:30

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

- 14:30 **Aiglstorfer, M.**, Žliobaitė, I., Amson, E., Lintulaakso, K., & Heizmann, E. Going digital—The Elmar Heizmann Typenkatalog
- 14:45 **Barry, J. C.**, **Behrensmeyer, A. K.**, Morgan, M. E., & Pilbeam, D. R. The Harvard–Geological Survey of Pakistan Siwalik Database
- 15:00 **Belmaker, M.** The potential of intraspecies ecometrics in NOW: *Microtus guentheri* (Rodentia, Cricetidae) mesowear as an example

- 15:15 **Sánchez López, L.**, Ruiz-Sánchez, F. J., & Fagoaga, A. New contributions to the knowledge of the paleobiogeographical context of the Late Miocene–Early Pliocene rodent fauna from the Iberian Peninsula
- 16:00 **Tallavaara, M.**, Belmaker, M., Vepsäläinen, J., Lintulaakso, K., & Žliobaitė, I. Archaeology tab—A new feature in the NOW database
- 16:15 Lintulaakso, K., Žliobaitė, I. The future and current NOW