PALBINS: Draft agenda

13th September:
Location: Auditorium of the Grande Galerie de l'Evolution, 36 rue Geoffroy Saint Hilaire

13:00 – Welcome and registration

13:30 – MNHN Introduction
13:50 – Michelle Price (Consortium of European Taxonomic Facilities, Brussels): CETAF and Palaeo-bioinspiration
14:10 – Guillaume Lecointre (Muséum national d'Histoire naturelle, Paris): Story-tellings

Principles of Palaeo-bioinspiration
14:35 – Michael Habib (University of California, Los Angeles): Palaeo-bioinspiration: Drawing on the fossil record to advance innovation

15:00 – Tea/Coffee

15:30 – Thomas Speck (University of Freiburg): Fossil plants as inspiration for biomimetic materials systems in technology and architecture
15:55 – Eberhard Frey (State Museum of Natural History Karlsruhe): Biomimesis, Bionics, technical biology and Paleontology: revisiting the neglected function of comparison
16:20 – Discussion: Principles of Palaeo-bioinspiration (moderated by Eberhard Frey)
16:50 - Sylvain Charbonnier (Muséum national d'Histoire naturelle, Paris): "Mondes disparus»: Introduction to the MNHN’s forthcoming exhibition

17:30 - Close

14th September:
Location: Auditorium of the Institut de Paléontologie Humaine, 1 rue René Panhard

9:00 – Welcome and Coffee

Palaeo-bioinspiration applications

Palaeo-bioinspiration applications 1: Construction and protection
9:30 - Chris Broeckhoven (University of Antwerp): Learning from the past, looking to the future: glyptodonts as bioinspiration for meteoroid shielding
9:55 - Valentina Perricone (University of California, Irvine)/Natasha Heil (Ecole Nationale Supérieure d'Architecture de Paris La Villette): Back to the future architecture: a new shell structure design inspired by glyptodont body armour
10:20 – Ardian Jusufi (Swiss Federal Labs for Materials Science and Technology/University of Zurich): PaleoRobotic reconstruction of a mammalian knight: When evolution leads to armor and tail weaponry

10:45 - Tea/Coffee

11:15 - Gilles Cuny (Université Claude Bernard-Lyon I): Fish enameloid: a model for multi-function material?
11:40 - Alexandra Houssaye (Muséum national d'Histoire naturelle, Paris): Bone structure-function relationships for palaeo-bioinspiration
12:05 - Nathan Pili (University of Manchester): When is a bone not a bone?

12:30 – Lunch

Palaeo-bioinspiration applications 2: Hydrodynamics and Aeromechanics
14:00 - Héctor Botella Sevilla (University of Valencia): Palaeozoic armoured jawless fishes as inspiration in the design of biomimetic Micro-Underwater Vehicles
14:25 - Marc Desmulliez (Heriot-Watt University, Edinburgh): Measurement of drag coefficients of 3D printed inflated ammonite shells
14:50 - Michael Habib (University of California, Los Angeles): Winged Wonders: Pterosaur anatomy yields unique insights for mechanical design
15:15 – Romain Garrouste (Muséum national d'Histoire naturelle, Paris): Can the dragonflies of the past, including the giants of the Palaeozoic, inspire us? Lessons in extant biophysics applied to insect fossils

15:40 - Coffee/tea

Palaeo-bioinspiration applications 3: Sensing and thermo-dynamics
16:10 - Tom Challands (University of Edinburgh): Palaeobioinspiration from fossil fish sensory systems
16:35 – Séverine Toussaint (Humboldt University of Berlin): An innovative force sensor technology mimicking distal pads’ functional morphology to study the evolution of locomotion in arboreal mammals
17:00 - François Clarac (Muséum national d'Histoire naturelle, Paris): The crocodilian bone ornamentation: a heat transfer device
17:25 - Discussion: Palaeo-bioinspiration applications (moderated by Thomas Speck/Alexandra Houssaye)

18:00 - Close

19:00 – Cocktail (Institut de Paléontologie Humaine, 1 rue René Panhard)
15th September:
Location: Auditorium of the Grande Galerie de l'Evolution, 36 rue Geoffroy Saint Hilaire

9:00 – Welcome and Coffee

9:30 - Palaeo-bioinspiration: Challenges and future directions (moderated by Chris Broeckhoven and Mike Habib)
11:30 – Discussion/next steps for PALBINS community
12:00 – Closing ceremony

12:30 – Lunch

14:00 – Tour of the MNHN (Meeting point: outside the Grande Galerie de l'Evolution, 36 rue Geoffroy Saint Hilaire)