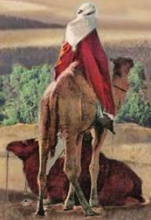


12-16  
MARCH  
2019

6<sup>TH</sup>



# YOUNG NATURAL HISTORY SCIENTISTS' MEETING



**6th YNHM Program**

[YNHM2019.SCIENCESCONF.ORG](http://YNHM2019.SCIENCESCONF.ORG)





The associations **BDEM** and **Symbiose 6** are pleased to welcome you to the 6th Young Natural History scientists Meeting at the **National Museum of Natural History (MNHN)** of Paris. We hope that this congress created for young scientists will provide you with the opportunity to present, possibly for the first time, your research in a relaxed but studious atmosphere. We believe that the YNHM is a great chance for everyone to have a first international congress experience.

We thank you all for coming and hope you will enjoy the conference and get opportunities for networking.

We would like to thank all the members of the six juries, all the guides of the excursions and Thomas Guillemaud for the PCI workshop.

Faithfully yours,  
**The 6<sup>th</sup> YNHM Organizing Committee**

Agnel Myriam; Beaugiraud Bruno; Bento da Costa Laura; Billaud Olivier; Bonade Morgane; Bouissou Amélie; Boyer Poirot Doreen; Bronnert Constance; Crispolon Elodre; Curaudeau Manon; Dabir Diane; Danet Alain; De Brito Léa; de Mazancourt Valentin; Deguines Nicolas; Deregnacourt Isabelle; Devillez Julien; Duchenne François; Fabre Thibaud; Favreau Charly; Gastineau Adrienne; Giannetti Yann; Gonzalez Diane; Gueriau Pierre; Hozer Clara; Jauvion Clément; Kondratyeva Anna; Lefebvre Pauline; Lefebvre Rémi; Lemierre Alfred; Louail Margot; Mallet Christophe; Mansuit Rohan; Mesfin Isis; Monnier-Corbel Alice; Mouchet Maud; Noiret Aude; Plasse Martial; Porcher Emmanuelle; Princé Karine; Rabier Robin; Raynaud Benjamin; Rousou Maria; Rousteau Typhaine; Royo Julie; Rozen David; Sanders Malcom; Silva Nicolas; Stavrova Trajanka; Thomas Arbez; Tribondeau Alicia; Truong Minh-Xuan; Vautrin Rachel; Vitesse Delphine; Zéléla Bouvard Ambre...

We also thank:

**Sponsors for their financial support**



**Sponsors for their gifts**



**Scientific societies**





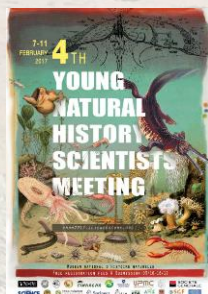
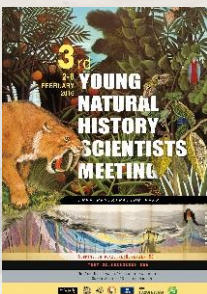
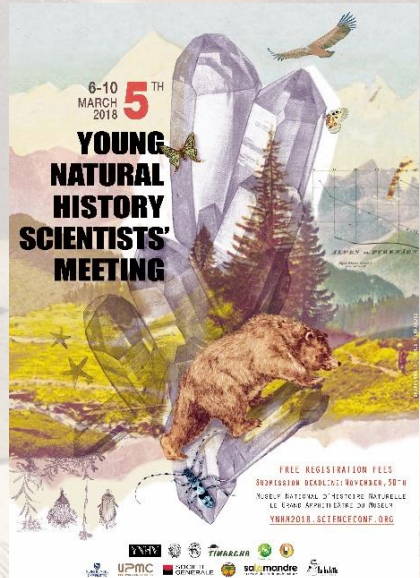
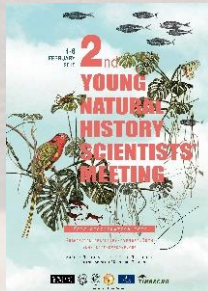
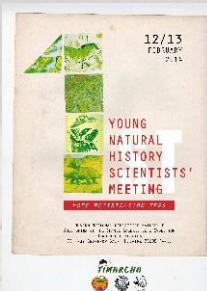
# The YNHM history

Since 1995, the BDEM (Bureau des Doctorants et Etudiants du Muséum) association of PhDs and Master students of MNHN organized an annual congress following a specific theme, often pluridisciplinary to attract the most audience possible, but it somehow limited the scientific discussion made essentially in French. Hence, in 2014, the organizing committee decided to change the congress' format. Why delimiting the congress to a specific theme when we were already all gathered by Natural Sciences? The next day, the first edition of the Young Natural History scientists Meeting was born.

**Our main goal** was to offer young scientists an opportunity to experience their first communication in a scientific congress by reuniting several crucial elements:

- Propose scientific communication selected by a scientific committee composed of Master and PhD students and post-doctoral fellows ;
- Organize a congress of the level of international scientific meetings but open only for non-permanent young researchers, in English, with sessions covering all disciplines of Natural Sciences;
- Open the congress to other French and foreign universities and provide grants to help students from foreign countries to attend to the congress ;
- Increase the congress attractiveness by inviting renowned researchers to give opening talks for each session and organizing public conferences to which we invite students from high schools.

This experience proved to be successful as for the sixth year in a row, the YNHM attract every year over **300 young researchers in Natural sciences** from more than 30 different countries.



## TUESDAY 12th of March

8:30 - 9:30

Registration

9:00 - 9:30

Opening speech: Anna Kondratyeva & Frédérique Chlous

9:30 - 10:00

Keynote speaker: Amarelle Landias

10:00 - 10:15	Benjamin Wasiliewski	Geochronology and crustal evolution of the Eoarchean Saglek-Hebron Complex (Northern Labrador)
10:15 - 10:30	Lisa Nink	Characterisation of four early Pleistocene fossil mammal sites of southeastern Australia
10:30 - 10:45	Valentin Buffa	Redescription of "Metoposaurus" azerouali from the late Triassic of the Argana Basin (Morocco), phylogeny and evolution of the Metoposauridae (Amphibia, Temnospondyli)
10:45 - 11:00	Lucile Créte	Multiproxy study of mixed-feeding antelopes' diet to investigate past vegetation changes in the eastern Africa (3.5 - 1.6 Ma)

Coffee break

11:30 - 11:45	Rémi Lefebvre	Taphonomy in Morphology: How to interpret the shape variation of the limb bones sauropodomorph dinosaurs through the case study of the intrageneric variability in Plateosaurus
11:45 - 12:00	Nora Djahnit	Isolation, characterization and determination of biotechnological potential of oil degrading bacteria from Algerian centre coast
12:00 - 12:15	Lauren Sewell	The springboks' Plio-Pleistocene environment: the dental evidence
12:15 - 12:30	Laura Bento de Costa	Title upcoming

Lunch break

14:00 - 14:30

Keynote speaker: Sophie Nadot

14:30 - 14:45	Cyril Etienne	Graviportality and its effect on tarsus bone shape: a morphometrical study on extant and extinct Rhinocerotidae and their relatives
14:45 - 15:00	Rohan Mansuit	The muscular anatomy of the pelvic fin of the extant coelacanth <i>Latimeria chalumnae</i>
15:00 - 15:15	Manon Hullot	Development of a tool for the reconstruction of rhinocerotoid palaeodiets, using dental texture microwear and dietary preferences of extant species
15:15 - 15:30	Paul Zaharias	An exon-captured based phylogeny of the Turridae (Gastropoda, Conoidea)

Coffee break

16:00 - 16:15	Oussama Bouarabia	Phylogeography and taxonomy of five species of the genus <i>Gerbillus</i> (Rodentia, Muridae) in Morocco based on molecular data
16:15 - 16:30	Pablo Padilla	Is dispersal a constraint compromising instantaneous muscle power output in favour to a more sustainable work?
16:30 - 16:45	Léa De Brito	Diversity of <i>Pityostrobus andraei</i> (Pinaceae) from the Belgian Wealden : morphometry and phylogeny
16:45 - 17:00	Auriale Domont	Morphometrics methods to distinguish different equids species

17:15 - 19:00

Poster session: Earth & Systematics

19:15 - 20:15

Movie projection "Entre 2 Amériques" (english subtitled)

## WEDNESDAY 13th of March

**8:30 - 9:00**

**Registration**

**9:00 - 9:30**

**Keynote speaker: Céline Bellard**

- |               |                  |  |
|---------------|------------------|--|
| 9:30 - 9:45   | Stanislas Rigal  | Impact of global changes on spatial and temporal dynamics of interspecific association in birds communities  |
| 9:45 - 10:00  | Joanna Bialas    | What determines the nest reoccupation in white stork? Is the proximity of landfills significant?   |
| 10:00 - 10:15 | Clémentine Préau | Niche modelling to guide conservation actions for the endangered crayfish <i>Austropotamobius pallipes</i> in relation to the invasive <i>Pacifastacus leniusculus</i> in France |
| 10:15 - 10:30 | Matheus Neves    | The endemism areas of the High Paraguay Basin, the Pantanal and surrounding plateaus, using amphibians as a model  |
| Coffee break  |                  |  |
| 11:00 - 11:15 | Margot Neyret    | Land use history and landscape are the main drivers of plant communities in agricultural landscapes of South-East Asia   |
| 11:15 - 11:30 | Imane Chamkhi    | Molecular analysis and morphological characterization of arbuscular mycorrhizal (AM) fungal communities inhabiting the roots and the soil of <i>Crocus sativus</i> L. (saffron)  |
| 11:30 - 11:45 | Irene Castañeda  | Trophic patterns and home range size of two generalist urban carnivores: a review  |
| 11:45 - 12:00 | Julie Shapiro    | Bats and their bacteria in a changing savanna landscape  |

Lunch break

**14:00 - 14:30**

**Keynote speaker: Florence Débarre**

- |               |                       |  |
|---------------|-----------------------|--|
| 14:30 - 14:45 | Ombeline Sculfort     | Evolution of chemical defenses in mimetic <i>Heliconiini</i> butterfly communities   |
| 14:45 - 15:00 | Gomes Elisa           | Does Artificial Light At Night affect energetic reserves and the trade-off between current and future reproduction in a parasitoid wasp? |
| 15:00 - 15:15 | Guillaume Dillenseger | How migration ecology may influence hormonal status in birds   |
| 15:15 - 15:30 | Yacine Youssef        | Collapse and rescue of evolutionary food webs under climate warming  |

Coffee break

- |               |                     |   |
|---------------|---------------------|---|
| 16:00 - 16:15 | David Rozen-Rechels | Plastic responses to water restriction implies different tempos for behavioural and physiological traits in a wide-ranging lizard |
| 16:15 - 16:30 | Gabriel M. Riaño    | Signatures of natural selection in the mitochondrial genomes of Lacertid lizards  |
| 16:30 - 16:45 | Martin Quque        | A proteomic insight into life-history trade-offs in social insects  |
| 16:45 - 17:00 | Frederico Valentine | The role of ecology in evolutionary pathways to cooperative breeding in Mammals   |

**17:15 - 19:00**

**Poster session : Biodiversity & Evolutionary Ecology**

## THURSDAY 14th of March

**8:30 - 9:00**

**Registration**

**9:00 - 9:30**

**Keynote speaker: Sylvie Le Bomin**

9:30 - 9:45	Colline Brassard	Commensalism and "domesticity" in canids from the Old World from the Late-Glacial to Holocene
9:45 - 10:00	Gabriel Jacome	Spatial and temporal model of dengue fever dynamics based on social and climatic factors for a climate change adaptation in Guayaquil, Ecuador
10:00 - 10:15	David Gocel-Chalté	Spatial study of old charcoal production sites' taxa composition, in Northern Vosges Mountains (France)
10:15 - 10:30	Marie Seguedy	Zooarcheological study of the bone assemblage from the Upper Paleolithic site of Pilisszántó I (Hungary)
Coffee break		

11:00 - 11:15	Margaux Butet	The Exotic Animal in France: The royal menagerie to the Scientific Institution, from the 17th century to the beginning of the 19th century
11:15 - 11:30	Sara Oufquir	Ethnopharmacological survey on medicinal plants traditionally used as treatment in patients with cancer, Marrakech
11:30 - 11:45	Delphine Vittese	Focus on the anthropic percussion stigmata to identify original Neandertal strategies of marrow extraction
11:45 - 12:00	Joan Fullola Isern	Comparative morphometry and functional analysis of the Serinyadell points
12:00 - 12:15	Thomas Guillemaud	Peer Community In presentation

Lunch break

13:30 - 14:00		<b>Keynote speaker : Clémentine Vignal</b>
14:00 - 14:15	Romain Pintore	The potential and limits of Thin-Plate Splines retrodeformation on asymmetrical objects: Simulation of taphonomical deformations on a modern horse and application on a fossil sample of sauropodomorph dinosaurs bones
14:15 - 14:30	Hugo Gruson	What's inside? Ecological niche estimation from data points using concave volumes
14:30 - 14:45	Paul Savary	Expanding genetic graphs' potential to analyse ecological connectivity: assessment of graphs construction methods
14:45 - 15:00	Benoît Perez-Lamarque	Modeling host-microbiota evolution for characterizing symbiont inheritance and application to the great apes microbiota
Coffee break		

15:30 - 15:45	Mai Fahmy	Assessing vertebrate biodiversity in Madagascar through leech-derived iDNA: Methodological advances and ecological insights
15:45 - 16:00	Pedro Faria	The challenges of integrating data from Natural History Collections into big biodiversity data repositories
16:00 - 16:15	Ilyass Filali Alaoui	Innovative methods to study the reproductive system and the pollen dissemination (application on the argan tree)
16:15 - 16:30	Sophia Lambert	Estimating diversification rates from phylogenies when the total number of taxa is unknown

**16:45 - 18:45**

**Poster session : Humanities & Methods**

**20:00 - 1:00**

**Closing Gala evening**

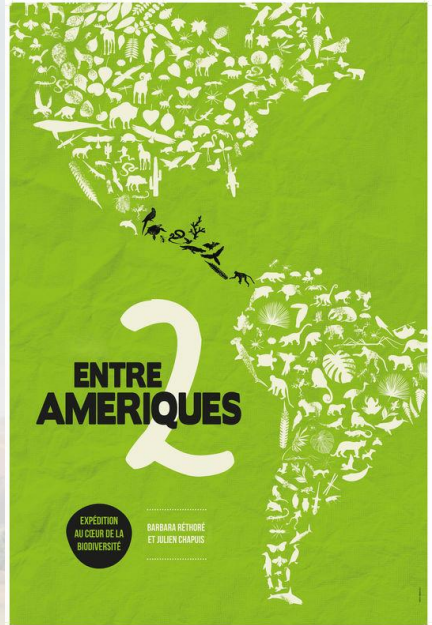


# Social events

## Tuesday 12<sup>th</sup>, 19:15, Movie projection: “Americas In-between”

*A documentary by Barbara Réthoré & Julien Chapuis*

Isthmus that connects the North to the South, Central America is one of the richest and most threatened reservoirs of biodiversity of the planet. From Southern Mexico to Panama, Barbara and Julien led a 200-day expedition alongside those who act to protect nature in this region. Through encounters, discoveries and testimonies, the two biologists share with us their adventure, both scientific and human. This inspiring documentary, on a road movie tone, warns us to take urgent action, invites us to reconsider our relationship with nature and questions our answers in addressing the biodiversity crisis.



## Photographic contest

This year a photographic contest is organized online. You could admire selected photos on the 6<sup>th</sup> YNHM website. They will be also projected during the closing Gala. **Do not forget to vote for your favorite at the registration desk!** Results of the vote will be given at the Gala evening.

## Thursday 14<sup>th</sup>, 20:00 Gala evening

You are all invited on Thursday evening to join us at the Gala to share some food, drinks and music and celebrate yet another edition of the YNHM. We will award prizes to the best oral and poster presentations. Come to enjoy the party! **And don't forget your participant badge to enter.**

**YNHM  
2018**



# Social events

## Friday 15<sup>th</sup> Public conferences

9:00 – 10:20 *Cédric Sueur*

### **ANTHROPOMORPHISM: BETWEEN MERITS AND DEMERITS**

In the context of our relationship with animals, anthropomorphism is defined as the attribution of human characteristics such as intentions, feelings, and emotions to animals of different species, and this, irrespective of our knowledge of the ethology of the species. This kind of cognitive ability for projection would have evolved in the human being so that humans could better understand the world around them and thus better interact with it. However, we see today that this anthropomorphism, which should no longer be used as a precautionary principle, is becoming more and more in systematic use in our relationships with animals. The question that arises is whether the unfounded overuse of these concepts allows us to better manage the welfare of animal species and their representatives or on the contrary, hinders our relationship with them.



10:30 – 12:00

The name of the invited person will be announced during the meeting.





# Social events

## Galleries access

Don't forget that during the congress (12-16/03/19) you can access all these galleries of the Muséum **for free by just showing your badge at the entrance:**

- Grande Galerie de l'Evolution
- Galerie de Minéralogie
- Galerie de Botanique
- Galerie de Paléontologie et d'Anatomie comparé
- Grandes serres
- Ménagerie



Please note that all galleries are closed on Tuesdays.

## Friday 15<sup>th</sup> Excursions

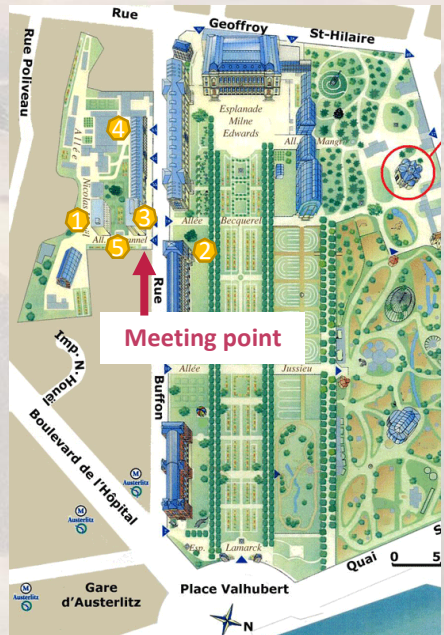
People who enrolled for the excursions have to be on time at the meeting point at 13:55 for the first ones and at 15:00 or 15:15 for the second ones:

- Taxidermie ①
- Herbarium ②
- Collections of Entomology ③
- Collections of Comparative anatomy ④

## ⑤ Peer Community In Workshop

The workshop will explain what it is and how it works. PCI will make a brief presentation about their activity after Humanities oral session, on Thursday 14th at 12:15 AM.

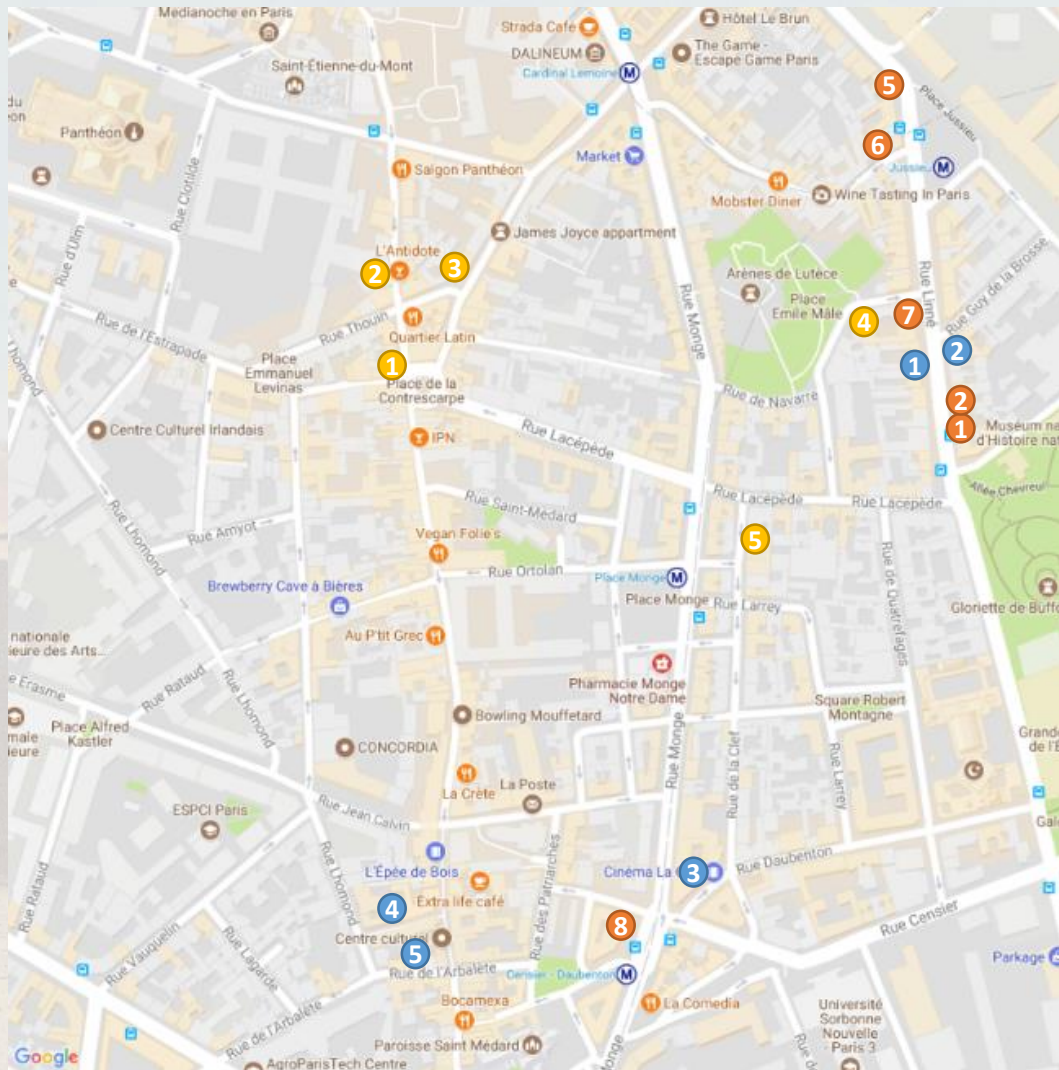
“The “Peer Community in” (PCI) is a non-profit scientific organization that aims to create specific communities of researchers reviewing and recommending, for free, unpublished preprints in their field (i.e. unpublished articles deposited on open online archives like arXiv.org and bioRxiv.org). To a lesser extent, they may also recommend postprints (i.e. articles already published in journals).”



## Saturday, 16<sup>th</sup>, Field trip

The enrolment will be open during the meeting, at the registration desk.

# Where to eat a bite



## Eat in a small restaurants

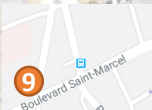
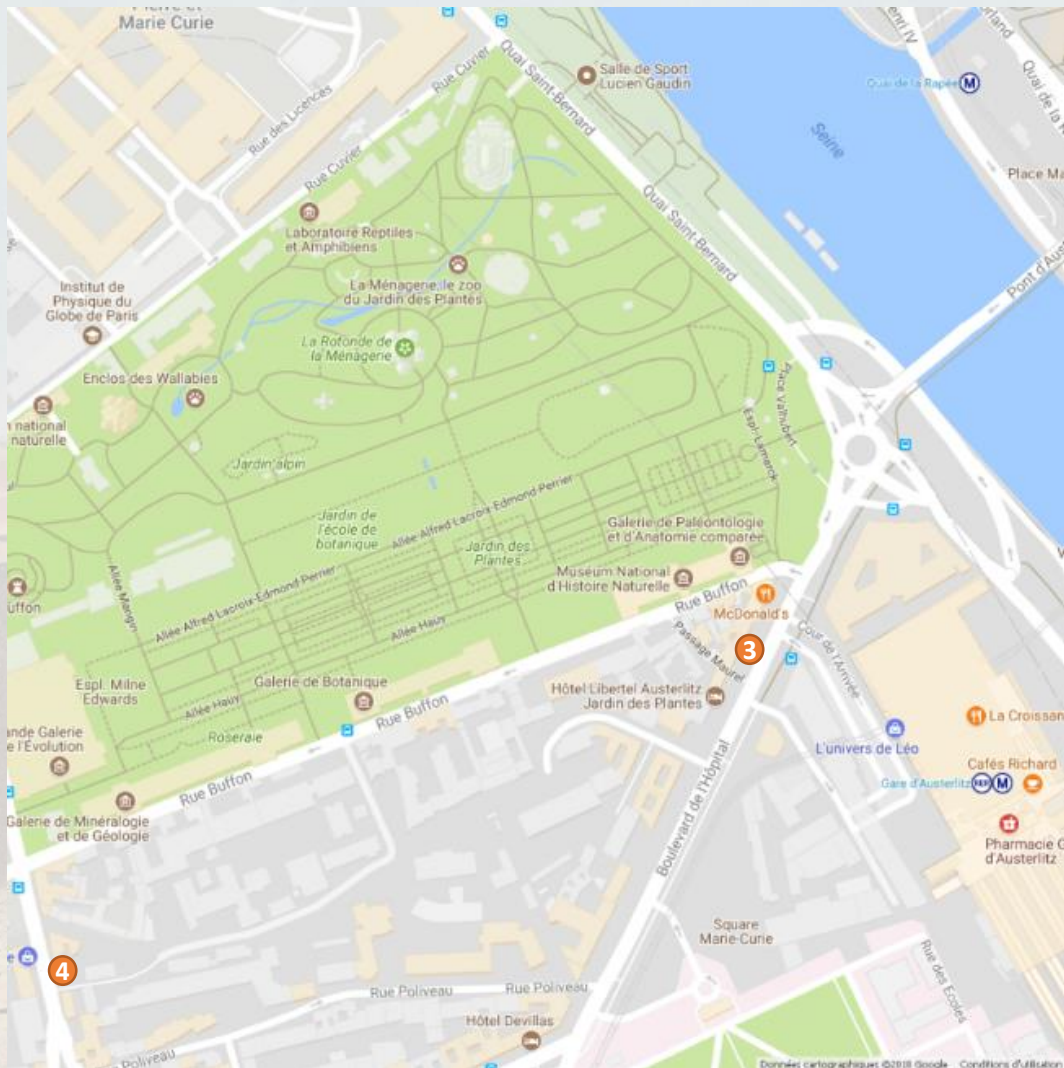
- 1 L'étoile du Liban – 13 rue Linnée
- 2 L'arbre à cannelle – 14 rue Linnée
- 3 Aux délices d'Asie – 36 rue Daubenton
- 4 Golosino IT – 4 square Vermouze
- 5 Les petits plats de Marc – 6 rue de l'Arbalète

## Grab a sandwich

- 1 Maison Cocherel – 6 rue Linnée
- 2 T & A – 8 rue Linnée
- 3 Gabriel artisan boulanger – 4 boulevard de l'Hôpital
- 4 MPS boulanger pâtissier – 30 rue Geoffroy Saint-Hilaire



# or grab a drink !



## Buy a drink

- ⑤ Aux délices de Jussieu – 28 rue Jussieu
- ⑥ Chaud les sandwiches – 4, rue des Boulangers
- ⑦ ⑧ Subway – 19, rue Linné / 98 rue Monge
- ⑨ L'epi Saint Marcel – 56 bd St-Marcel
- ① Le Requin Chagrin – 10 rue Mouffetard
- ② Le Chapi Chapo – 50 rue Descartes
- ③ Rollin's Pub – 18 rue Rollin
- ④ Baker Street Pub – 9 rue des Boulangers
- ⑤ The Local – 54 rue de la Clef



Jussieu



**1** Registration & Oral presentations  
Grand Amphithéâtre du Muséum



**2** Poster sessions & movie projection  
Bâtiment Atrium & Amphithéâtre 25



**3** Closing Gala  
Cantine du Muséum

**Gare d'Austerlitz**



**YOUR MAP FOR THE**

