

Curriculum vitae

Le Meillour Louise

PhD student in palaeoproteomics (2017-2020)

DIM MAP - MNHN

Muséum national d'Histoire naturelle – CNRS

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Academics

2017-2020: **Doctorate** (PhD) in archaeology and biochemistry. “Introduction and diffusion of small cattle in Africa: molecular approaches”. Co-financed by the DIM MAP (Ile-de-France region) and the MNHN, Paris, France. Under the supervision of Dr. Joséphine Lesur, Dr. Séverine Zirah and Dr. Antoine Zazzo and the tutorate of Dr. David Pleurdeau.

2015-2017: **Master's** degree ‘Evolution, Natural Patrimony and Societies’, specialty ‘Quaternary and Prehistory’, Muséum national d'Histoire naturelle, Paris, France. Honors *Magna Cum Laude*.

2012-2015: **Bachelor's** degree in History of Art and Archaeology, Sorbonne Université (Faculté des Lettres), Paris, France. Honors *Cum Laude*.

2008: **Baccalaureate** (Advanced Level), Literary series. Lille, France. Honors *Magna Cum Laude, European english*.

Scientific experience

2017 (5 months) Palaeoproteomics. “Early domestication in Austral Africa: contribution of palaeoproteomics data”.

2nd year of Master's internship. Under the supervision of Dr. Antoine Zazzo, Dr. Séverine Zirah and Dr. David Pleurdeau, MNHN, Paris, France.

2016 (1 month) Palaeoproteomics. “Palaeoproteomics applied to archaeology: identification of small bovids dental remains from the site of Leopard Cave, Namibia”.

1st year of Master's internship. Under the supervision of Dr. Antoine Zazzo and Dr. Sophie Cersoy, MNHN, Paris, France.

2015 (1 month) Zooarchaeology. “Zooarchaeological study of an ancient collection from the Roc-de-Marcamps, Gironde”.

Bachelor's internship. Under the supervision of Dr. Marylène Patou-Mathis and Dr. Laurent Crépin, MNHN, Paris, France

2010 (1 month) Field work. Excavations. Prehistory.
Caune de l'Arago, Tautavel, France. Direction: H. de Lumley.

2006 (1 month) Molecular biology. ‘Eukaryote DNA cloning’.
Under the supervision of Dr. Jean-Claude Michalski, Université Lille 1, Villeneuve d'Ascq, France.

Communications

Publications

Peer reviewed international journals

Le Meillour, L., Zazzo, A., Lesur, J., Cersoy, S., Marie, A., Lebon, M., Pleurdeau D. & Zirah, S. 2018. Identification of degraded bone and tooth splinters from arid environments using palaeoproteomics. *Palaeogeography, Palaeoclimatology, Palaeoecology*, 511, 472-482. <https://doi.org/10.1016/j.palaeo.2018.09.013>

Le Meillour L., Lesur J., Cersoy S., Marie A., Lebon M., Zirah S., Zazzo A., Pleurdeau D. *in prep.* « The missing sheep »: rewriting domestic caprines introduction in Austral Africa using ancient proteins. *Nature Ecology and Evolution*.

Symposium proceedings

Lesur J., Le Meillour L. accepted, to be published in october 2019. Moutons et chèvres à la conquête des déserts africains. Actes des XXXVIIIe Rencontres d'Histoire et d'Archéologie de la ville d'Antibes.

Oral communications

Le Meillour L. 2019. *Apports de la biochimie aux problématiques archéologiques*. Journée annuelle du DIM Matériaux Anciens et Patrimoniaux, Paris, January 16th 2019.

Le Meillour L. 2018. *Presentation of the 'IBAAM' PhD project*. Journée des jeunes chercheurs du DIM Matériaux Anciens et Patrimoniaux, Paris, December 6th 2018.

Lesur J. & Le Meillour L. 2018. *Moutons et chèvres à la conquête des déserts africains*. Rencontres d'Archéologie et d'Histoire de la ville d'Antibes, Colloque 'Hommes et Caprinés', Antibes, France, October 16th-18th 2018.

Le Meillour L., Lesur J., Cersoy S., Marie A., Lebon M. Pleurdeau D., Zirah S. & Zazzo A. 2018. « *To be pastoralist or not to be ?» Tracing the introduction of domestic caprines in Southern Africa using Palaeoproteomics*. 24th Society of Africanists' Archaeologists conference, Toronto, Canada, June 19th 2018.

Le Meillour L., Cersoy S., Zirah S., Lebon M., Lesur J., Pleurdeau D., Zazzo A. 2017. *Recovering bone proteins in arid environment using palaeoproteomics*. 8th Bone Diagenesis Meeting, Oxford, UK, September 2017.

Le Meillour L., Cersoy S., Zirah S., Marie A., Lebon M., Lesur J., Le Danvic C., Pleurdeau D., Nagnan-Le Meillour P., Zazzo A. 2017. *Tracing the introduction of domestic animals in Austral Africa using palaeoproteomics*. Oral comm., 4th Young Natural History scientists' Meeting, Paris, France, February 2017.

Le Meillour L., Cersoy S., Zirah S., Marie A., Lebon M., Lesur J., Le Danvic C., Pleurdeau D., Nagnan-Le Meillour P., Zazzo A. 2016. *Palaeoproteomics for archaeology: identification of small bovids dental remains from Leopard Cave, Namibia*. « Club Jeunes » of the 33èmes 'Journées de la Société Française de Spectrométrie de Masse', Bordeaux, France, September 2016.

Poster communications

Le Meillour L., Zirah S., Lesur J., Lebon M., Pleurdeau D., Zazzo A. 2019. *Recovering bone and tooth proteins in arid environments using palaeoproteomics, a case study in the Late Stone Age site of Toteng, Botswana*. Scientific Symposium Frontiers in Heritage Science, Paris, France.

Le Meillour L., Zazzo A., Cersoy S., Marie A., Lebon M., Lesur J., Le Danvic C., Pleurdeau D., Nagnan-Le Meillour P., Zirah S. 2017. *Tracing the introduction of domestic small bovids in Austral Africa using palaeoproteomics*. SMMAP, Marne-la-Vallée, France.

Le Meillour L., Cersoy S., Zirah S., Marie A., Lebon M., Lesur J., Le Danvic C., Pleurdeau D., Nagnan-Le Meillour P., Zazzo A. 2017. *Proteomics for archaeology: identification of small bovids dental remains from Leopard Cave, Namibia*. 4th Young Natural History scientists' Meeting, Paris, France.

Le Meillour L., Cersoy S., Zirah S., Marie A., Lebon M., Lesur J., Le Danvic C., Pleurdeau D., Nagnan-Le Meillour P., Zazzo A. 2016. *Proteomics for archaeology: identification of small bovids dental remains from Leopard Cave, Namibia*. 33rd 'Journées de la Société Française de Spectrométrie de Masse', Bordeaux, France.

Theses

Le Meillour L. 2017. Beware the antelopes. *Apports de la paléoprotéomique à l'étude des stratégies de subsistance en Afrique australe au Later Stone Age*. Mémoire de Master 2 de la spécialité « Quaternaire et Préhistoire » du Master « Evolution, Patrimoine Naturel et Sociétés » du Muséum national d'Histoire naturelle, Paris, juin 2017, mention très bien.

Le Meillour L. 2016. *Paléoprotéomique appliquée à l'archéologie : identification des restes dentaires de petits bovidés du site de Leopard Cave, Namibie*. Mémoire de Master 1 de la spécialité « Quaternaire et Préhistoire » du Master « Evolution, Patrimoine Naturel et Sociétés » du Muséum national d'Histoire naturelle, Paris, juin 2016, mention très bien.

Lab/team meeting

Pleurdeau D., Le Meillour L., Zazzo A., Cersoy S., Marie A., Lebon M., Lesur J., Le Danvic C., Nagnan-Le Meillour P., Zirah S. 2017. *Dynamique des populations à l'Holocène en Namibie*. Séminaire de l'Unité de Glycobiologie Structurale et Fonctionnelle (UGSF), UMR 8576 CNRS/Université Lille 1-INRA, Villeneuve d'Ascq. Invited speakers.

Several presentations during the seminars of UMR 7245 (MCAM) team 'BIM' (dir. Dr. Y. Li) and UMR 7209 (AASPE) team 'SAPOA' (dir. M. Mashkour until January 2019, then J. Lesur).
Oral presentation during the young scientists day of UMR 7245 (December 2017).

Other

2019: Part of the organizing committee of the 'Archaeozoology, Genetics, Proteomics and Morphometrics' working group of the ICAZ (International Council of Archaeozoology), Paris, France, October 2019.

2017: Participation to the annual public event "Fête de la Science" at the MNHN. Bioarchaeology workshop of the UMR 7209.

Teaching experience

2017-2020: 32 hours of classes per academic year (sept.-june).

Interventions in two different specialties of the MNHN Master's degree: Mécanismes du Vivant et Environnement ('Living mechanisms and Environment') and Quaternaire et Préhistoire ('Quaternary and Prehistory').

Courses :
- 3h in Proteomics – 'Biochemistry applied to Archaeology' lecture.
- 16h in Biology applied to Archaeology – 'Paleoproteomics' lecture (3h), 'Basics in Biology' and 'Article analyses in proteomics and lipidomics' tutorials (2*3h), final exam surveillance (3h).
- 5h in Mass spectrometry – 'Mass spectrometry data understanding' tutorials (2*2,5h).
- 9h in Microbiology – Microbiology practical work.

Administrative responsibilities

2018-2019: elected representative of the PhD students of laboratory AASPE (UMR 7209). 2-years mandate.

2018 and 2019: elected representative of the PhD students to the Ecole Doctorale 227 board (MNHN-Sorbonne Université). 1-year mandate (elected in 2018 and 2019).

2017-2019: elected representative of PhD students at the 'Homme & Environnement' Department board of the MNHN (2-years mandate).