### Curriculum vitae

## LAURENT PALLAS (PhD)

Graduate School of Science – University of Kyoto, Japan. Department of Geosciences – University of Poitiers, France.

#### Contacts

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PALEVOPRIM - UMR 7262 CNRS INEE

http://palevoprim.labo.univ-poitiers.fr/2018/06/26/laurent-pallas/

#### Fields of Research

Evolutionary history of the Old World monkeys (i.e., Cercopithcoïdea).

Study of the adaptive traits of the monkey skeleton through shape analysis in a comparative and functional anatomical framework.

Study of the adaptive radiation, ecological dynamics and niche partitioning of ancient monkeys in an evolutionary framework.

## Practical skills in paleoprimatology

#### Technical skills

- Use of statistical (*i.e.*, R), visualization (*i.e.*, Avizo), engineering and 3D editing (*i.e.*, GeoMagic) as well as image analysis (*i.e.*, ImageJ including several plugins) and editing (*i.e.*, Adobe Illustrator & Photoshop) softwares.
- Use of 3D surfacic scanners (*i.e.*, NextEngine & Artec3D) and 3D printing devices (*i.e.*, Raise3d & Zortrax).

### Fieldwork skills

- Extraction and restoration of fossils during the following excavations: Les Auzières, Montréal-du-Gers and Shungura.
- Curation of fossils during the following excavations: Les Auzières.
- Paleontological prospecting for the following excavation (and ongoing excavation project): La Nautérie.

#### Communication skills

Organization and management of scientific seminars at PALEVOPRIM.

 Creation and animation of public stands at public scientific events (i.e., Fête de la Science – Science Festival and Printemps de la Recherche – The Research Spring.

Anatomy and diversity of the hominoids skull (stand runned during the Science Festival in partnership with Dr. Franck Guy).

The mammalian postcranial anatomy (event runned during The Research Spring in partnership with Florian Martin).

 Writing in public scientific magazine (<u>Une Affaire de Singes</u> – A Monkey business in Microscoop, CNRS Editions).

### **Education and Degrees**

2012-2015 BSc degree in Organismal, Population and Environmental Biology at Université Toulouse III – Paul

2014-2015 Erasmus Internship at The University of Manchester.

BSc Dissertation: <u>The shoulder anatomy of early hominins</u> under the supervision of Pr. Andrew Chamberlain.

2015-2017 MSc degree in Vertebrate Paleontology at Université de Poitiers – SFA.

MSc Dissertations: The clavicular anatomy of early hominins under the supervision of Dr. Guillaume Daver (2016)

Cercopithecidae from the hominin-bearing fossiliferous area of Toros-Ménalla under the supervision of Drs.

Guillaume Daver and Franck Guy.

2017-2020 PhD degree in Vertebrate Paleontology – <u>Ecomorphological analysis of the Cercopithecidae postcranium from the Shungura Formation (Lower Omo Valley, Ethiopia)</u> under the supervision of Drs. Gildas Merceron, Leslea Hlusko and Guillaume Daver.

2022-2023 JSPS Fellowship – *Up in the tree: Functional anatomy and phylogeny of the earliest colobine from Nakali (Kenya)* under the supervision of Dr. Masato Nakatsukasa

## **Research Fellowships**

- Grant for the participation to international congress by the Theodore Monod doctoral school (AAPA congresses 2019 & 2020) (Bourse de participation à un congrés international – Fellowship for participation to an international congress).
- Grant for visiting paleontological fossil collections and neontological skeletal collections by the Theodore Monod doctoral school (Bourse à la mobilité de courte durée – Fellowship for short mobility terms).

### Courses taught and participation to educative projects

- Developmental Biology Practical courses on histological sections of chicken and frog embryos.
- Zoology Practical courses on the anatomy and ecology of crayfishes.
   Practical courses on the vertebrate locomotor apparatus.
- Paleontology Practical courses on the mammalian dental anatomy.

Practical courses on the anatomy and evolutionary history of cephalopods.

Practical courses on biostratigraphy and paleoenvironments.

- Geology Practical courses on gross mineral identifications.
  - Practical courses on plutonic and volcanic rocks formation.
- University trips Paleontological courses with a pedagogical visit at the Muséum National d'Histoire Naturelle (MNHN – Paris).

Sedimentological courses with pedagogical visit to emblematic Paleozoic, Mesozoic and Cenozoic fossiliferous site in the vicinity of Poitiers (France).

### **Students Advising**

Main supervisor

MSc Dissertation: <u>The lower limb of early Papionini (Primates, Cercopithecidae) from the Omo Group deposits (Shungura Fm. & Usno Fm., Lower Omo Valley, Ethiopia).</u> Undertaken by Tiphaine Brusse in 2019/2020 at the University of Poitiers.

MSc Dissertation: <u>Anatomy of a partial foot from a large colobine of the Shungura Formation (Lower Omo Valley, Ethiopia): phylogenetic and morphofunctional implications.</u> Undertaken by Andréa Boutet in 2020/2021 at the University of Poitiers.

BSc Dissertation: <u>Phylogenetic and ecomorphological aspects of the mandibular anatomy of extant and fossil cercopithecids</u>. Undertaken by Laurie Amberny in 2021 at the University of Poitiers and the University of Créteil (Paris-Est).

MSc Dissertation: <u>A functional analysis of the cercopithecid hindlimb remains from Hadar, Ethiopia.</u> Undertaken by Andréa Boutet in 2021/2022 at the University of Poitiers.

MSc Dissertation: <u>Mandibular anatomy of fossil cercopithecids from the Plio-Pleistocene.</u> Undertaken by Lili Boulet in 2021/2022 at the University of Poitiers.

Co-advisor

MSc Dissertation: <u>Morphological analysis of the humerus of Theropithecus.</u> Undertaken by Metasebia Endalamaw at the Muséum Nationale d'Histoire Naturelle de Paris in 2020/2021.

MSc Dissertation: <u>The lower limb of early Papionini (Primates, Cercopithecidae) from the Omo Group deposits (Shungura Fm. & Usno Fm., Lower Omo Valley, Ethiopia).</u> Undertaken by Tiphaine Brusse in 2020/2021.

MSc Dissertation: <u>Description and functional morphology of hominin shoulder remains from the early Pleistocene of the Shungura Formation (Lower Omo Valley, Ethiopia): functional and taxonomical implications</u>. Undertaken by Tiphaine Brusse in 2020/2021.

#### **Fieldworks**

2014-Present Montréal-du-Gers (32 – Gers, France) – In partnership with the Muséum d'Histoire Naturelle de Toulouse (MHNT) and Yves Laurent. Miocene mammal-bearing locality.

2016 Thézels (46 – Lot, France) – Under the supervision of the University of Poitiers and the Drs. Cécile Blondel and Guillaume Daver. Oligocene mammal-bearing locality.

2017 Montredon (34 – Hérault, France) – Under the supervision of the University of Montpellier, Musée de Cruzy and the Drs. F. Lihoreau, S. Adnet and L. Marivaux. Miocene mammal-bearing locality.

2015-Present Les Auzières (84- Vaucluse, France) – Under the supervision of the Drs. J.-B. Fourvel and N. Frerebeau. Late Pleistocene cave site (hyena den with punctual hominin occupation).

2019 Shungura (Lower Omo Valley, Ethiopia) – Under the supervision of the Drs. J.-R. Boisserie and A. Delagnes. Plio-Pleistocene hominin-bearing formation.

### **Peer-Reviewed Publications**

• Pallas L., Daver G., Mackaye H.T., Likius A., Vignaud P., Guy F. A window into the evolutionary history of Cercopithecidae: Late Miocene evidence from Chad, Central Africa. Journal of Human Evolution (132), pp.61-79, 2019.

Contribution: Conceptualization, data acquisition, formal analysis, writing the original draft and edition of the manuscript following reviews. This article has been published following the completion of a Master 2 internship at PALEVOPRIM.

Lihoreau F., Sarr, R., Chardon, D., Boisserie, J.-R., Lebrun R., Adnet S., Martin J.E., Pallas L., Sambou B., Tabuce R., Thiam M.M., Hautier L. A fossil terrestrial fauna from Tobène (Senegal) provides a unique early Pliocene window in western Africa. Gondwana Research (99), pp.61-79, 2019.

Contribution: Identification and description of a mammalian femur (carnivore, specimen SN-Tob-12-02) following a request of F. Lihoreau.

Pallas L., Daver G., Merceron G., Hlusko H., Boisserie J.-R. The postcranial anatomy of the leg and ankle of <u>Theropithecus brumpti</u> (Cercopithecidae, Papionini): Morphofunctional implications. Journal of Human Evolution (178), p.103333, 2023.

Contribution: Conceptualization, data acquisition, formal analysis, writing the original draft and edition of the manuscript following reviews. This article has been published following the completion of a PhD thesis at PALEVOPRIM.

 Guy F., Daver G., Mackaye H.T., Likius A., Boisserie J.-R., Moussa A., Pallas L., Vignaud P., Nekoulnang C. Postcranial evidence of late Miocene hominin bipedalism in Chad. Nature (609), pp. 94-100, 2023.

Contribution: Conceptualization, data acquisition and formal analysis regarding the protocol and data for assessing femoral neck anteversion in extant and fossil hominins.

## Submitted publications

**Pallas L.**, Daver G., Merceron G., Hlusko H., Boisserie J.-R. *Plio-Pleistocene* postcranial remains of Colobinae from the Omo Group deposits (Shungura Fm. and Usno Fm., 1967-2018 excavation campaigns, Lower Omo Valley, Ethiopia). Peer Community In Paleontology. In review.

**Pallas L.**, Daver G., Mackaye H.T., Likius A., Vignaud P., Guy F. *A not 'so-well' justified primate fossil calibration – a reply to de Vries and Beck (2023) and brief comments on the taxonomic status of* Cercopithecoides, Cercopithecoides bruneti *and KNM-LU 344*. Paleontologie Electronica. In review.

#### Published conferences abstracts

**Pallas L.**, Guy F., Mackaye H.T., Likius A., Vignaud P., Daver G. *Insights into the paleobiology of early Colobinae: new views from the Late Miocene of Central Africa, Chad.* American Association of Physical Anthropology – 2019, Cleveland (Ohio).

**Pallas L.**, Daver G., Merceron G., Hlusko L., Boisserie J.R. New views on the Plio-Pleistocene cercopithecids fauna from the Omo Group deposits (Lower Omo Valley, Ethiopia): paleoecological and ecomorphological insights from the Colobinae postcranial morphology. Congrés étudiant de l'école doctorale Théodore Monod (Student Congress from the Theodore Monod Doctoral School) – 2019, Poitiers.

**Pallas L.**, Daver G., Merceron G., Hlusko L., Boisserie J.R. New data on the Plio-Pleistocene colobine fauna from the Shungura Formation (Omo Group deposits, Lower Omo Valley, Ethiopia): insights from the postcranial anatomy. American Association of Physical Anthropology – 2020, Los Angeles (California).

**Pallas L.**, Endalamaw M., Hlusko L., Monson T., Brasil M., Boisserie, J.R. *Postcranial cercopithecid specimens from Shungura:* Papio, Theropithecus *or* Soromandrillus? The Anthropological Society of Nippon – 2022, Kyoto (Japan).

## Scientific public writings

**Pallas L.**, Daver G., Guy F., J.-R. Boisserie. *Une Affaire de Singes....* Microscoop (80), CNRS Editions Centre Limousin Poitou-Charentes, 2019.

Contribution: Conceptualization and writing the original draft and edition of the manuscript following reviews.

## Study stays of collections

2015-2023 Royal Museum for Central Africa, Tervuren (Belgium)

Muséum National d'Histoire Naturelle, Paris (France)

Musée des Confluences, Lyon (France)

Muséum d'Histoire Naturelle de Toulouse (France)

Natural History Museum Basel (Switzerland)

Anthropological Institute and Museum, University of Zurich

(Switzerland)

National Museum of Ethiopia, Addis Abeba (Ethiopia)

National Museum of Kenya, Nairobi (Kenya)

Grant Museum of Zoology, University College London (England)

Manchester Museum (England)

Bavarian State Collection of Zoology (Germany)

Bavarian State Collection for Palaeontology and Geology (Germany)

Center for the Evolutionary Origins of Human Behavior (Japan)

# **Professional memberships**

American Association of Physical Anthropologists (2019)

ARACHNE - Association pour la recherche en Archéologie, Technologie et Écologie (2017-Present)

Société d'Anthropologie de Paris (2019)

Société Francophone De Primatologie (2021/2022)

Anthropological Society of Nippon (2022/2023)