

## SHORT CV - Anne-Claire Fabre

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### EDUCATION

Ph.D.	University College London	Evolutionary Biology	February 2014
M.S.	Université Paris Diderot	Evolutionary Biology	June 2010
B.S.	Université Montpellier II	Biology & Geological Sciences	June 2006

### PROFESSIONAL HISTORY

06/2022 – now: Curator of mammals, NMBE and Assistant Professor, Universität Bern, Switzerland  
2021 – 2022: Marie-Skłodowska Curie Fellow, Museum für Naturkunde, Berlin, Germany  
2020 – 2021: Post-doc, Universität Zürich, Zürich, Switzerland  
2018 – 2020: Research Co-Investigator, Natural History Museum, London, UK  
2016 – 2018: Marie-Skłodowska Curie Fellow, Muséum National d'Histoire Naturelle, Paris, France  
2014 – 2016: Fondation Fyssen Fellow, Duke University, Durham, USA

### RESEARCH AREAS

Evolutionary Biology, Functional Morphology, Development, Vertebrates, Shape Evolution

### PUBLICATIONS in peer-reviewed scientific journals

59 total: 28 as corresponding/senior author

**Metrics** H-index Google Scholar: 25 (1826 citations); H-Index Web of Science: 21 (1219 citations)

### BOOK and BOOK CHAPTERS

1 Anatomical Atlas (Taylor & Francis Group) and 2 book chapters

### CONFERENCES

4 as a keynote speaker, 11 invited symposium presentations  
50 oral presentations (29 as 1<sup>st</sup> author); 28 poster presentations (7 as 1<sup>st</sup> author)

### PROFESSIONAL LEADERSHIP

International Society of Vertebrate Morphology, Executive Committee, elected, 2019-present  
Member at the Linnean Society, elected, 2020-present

### FELLOWSHIPS, GRANTS AND AWARDS (> 2.600.000 €)

ERC-2021-STG META-MORPHOSIS SERI-funded (M822.00039), 2022 (PI): **1.657.710 CHF**  
Ramon y Cajal fellowship, RYC2020-030074-I, 2021 (PI): **>477,200€**, declined  
Marie-Skłodowska Curie fellowship, 2021-2023 (PI): **162,806 €**  
Marie-Skłodowska Curie fellowship, 2016-2018 (PI): **173,076 €**  
Fondation Fyssen fellowship, 2014-2016 (PI): **50,000 €**  
Centre National de la Recherche Scientifique doctoral training fellowship, 2010-2013: **30,000 €**  
University College London Impact Grant fellowship, 2010-2013: **£30,000**  
+ several grants on different projects for an amount of **> 200,000 €**

### TEACHING AND KNOWLEDGE CONSTRUCTION

Biodiversity and Macroevolutionary Patterns, Morphometry and Shape Analyses, Vertebrate Paleontology, Functional Morphology

### ACADEMIC SUPERVISION

1 Postdoc, 5 PhD students, 20 M.Sc and 7 B.Sc students

## Curriculum vitae Anne-Claire Fabre

### Dr Anne-Claire Fabre

fabreac@gmail.com

<https://anne-claire-fabre.weebly.com/>

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#### RESEARCH ACTIVITY AND INTERESTS

I am an early-career evolutionary biologist and functional morphologist focusing on shape evolution across vertebrate systems. My research on micro- and macro-evolution integrates a wide range of biological disciplines to understand the evolution of morphology in relation to its development, function, behaviour and changes in the environment.

#### EDUCATION

Ph.D.	University College London	Evolutionary Biology	February 2014
Doctorat	Paris Diderot	Evolutionary Biology	September 2013
M.S.	Université Paris Diderot	Evolutionary Biology	June 2010
M.S.	Université Pierre et Marie Curie	Evolutionary Biology	June 2008
B.S.	Université Montpellier II	Biology & Geological Sciences	June 2006

#### PROFESSIONAL HISTORY

06/2022 – now: Curator of mammals, NMBE and Assistant Professor, Universität Bern, Switzerland.

01/2021 – 05/2022: Marie-Skłodowska Curie Fellow (EU EF project 101028747 -META-MORPHOSIS), Museum für Naturkunde (MfN, Berlin, Germany. Advisor: Prof. Fröbisch

11/2020- 10/2021: Postdoctoral researcher, Paläontologisches Institut und Museum, Zurich, Switzerland. Supervisor: Prof. Sánchez

05/2018 – 10/2020: Research Co-Investigator, Natural History Museum (NHM), Department of Life Sciences, London, UK. Advisor: Prof. Goswami

01/2016 – 01/2018: Marie-Skłodowska Curie Fellow (EU RI project 655694 -GETAGRIP), Muséum National d'Histoire Naturelle (MNHN), Département Adaptations du Vivant, Paris, France. Advisors: Dr. Herrel and Dr Pouydebat

01/2014 – 01/2016: Fondation Fyssen Fellow, Duke University, Department of Evolutionary Anthropology, Durham, USA. Advisor: Prof. Schmitt and Dr Wall

#### FELLOWSHIPS AND GRANTS

ERC Starting Grant, LS8, ERC-2021-STG META-MORPHOSIS SERI-funded (M822.00039), 2022 (PI): **1.657.710 CHF**

Ramon y Cajal fellowship, RYC2020-030074-I, 2021 (>**477,200€**, declined)

Marie-Skłodowska Curie fellowship EF, 2021-2023 (**162,806€**)

Spanish Government, PID2020-116908GB-I00, 2021-2025 (**181,500€**)

Marie-Skłodowska Curie fellowship RI, 2016-2018 (**173,000€**)

Fondation Fyssen fellowship, 2014-2016 (**50,000€**)

Centre National de la Recherche Scientifique doctoral training fellowship, 2010-2013 (**30,000€**)

University College London Impact Grant fellowship, 2010-2013 (**£30,000**)

Labex CEBA: Diversification of an ancient Guiana Shield lineage of fossorial frogs 2018 (**11,140€**)

Action Transversale Museum, 2018 (**3,000€**)

Labex BcDiv "Adaptation du système musculaire au milieu arboricole chez les mammifères Carnivora » (**3,486€**)

Labex BcDiv "Diversification phénotypique des Eupleridae (Mammalia, Carnivora), famille endémique de Madagascar » (**3,486€**)

Travel grant of the Fondation Bettencourt-Schueller, 2010-2014 (**3,000€**)

## Curriculum vitae Anne-Claire Fabre

### AWARDS

Marie Skłodowska-Curie Actions Seal of Excellence 2018

Marie Skłodowska-Curie Actions Seal of Excellence 2017

### PUBLICATIONS IN INTERNATIONAL PEER-REVIEWED SCIENTIFIC JOURNALS (59)

**Metrics:** H-index Google Scholar: 25 (1673 citations)

28 publications as first author and as senior or corresponding author (**bold and underlined**)

21 publications with my students (\*)

41 publications without my PhD advisor

Over one third of my publications are in a first quartile journals

- **Publications resulting from my PhD and prior (9)**

1. Herrel A, **Fabre A-C**, Hugot J-P, Keovichit K, Adriaens D, Van Hoorebeke L, Cornette R (2012) Ontogeny of the cranial system in *Laonastes aenigmamus*. *Journal of Anatomy* 221: 128-137. Citations = 15

I performed part of the data acquisition, the analyses and wrote the corresponding parts of the paper.

2. Genise JF, Garrouste R, Nel P, Grandcolas P, Maurizot P, Cluzel D, Cornette R, **Fabre A-C**, Nel A (2012) *Asthenopodichnium* in fossil wood: different trace makers as indicators of different terrestrial palaeoenvironments. *Palaeogeography, Palaeoclimatology, Palaeoecology* 365-366: 184-191. Citations = 29

I performed part of the data acquisition, the analyses and wrote the corresponding parts of the paper.

3. **Fabre A-C**, Cornette R, Peigné S, Goswami A (2013) Influence of body mass on the shape of forelimb in musteloid carnivorans. *Biological Journal of the Linnean Society* 110: 91-103. Citations = 46

I conceived the study, performed the entire data acquisition, analysed the data, and wrote the paper.

4. **Fabre A-C**, Cornette R, Slater G, Argot C, Peigné S, Goswami A, Pouydebat E (2013) Getting a grip on the evolution of grasping in musteloid carnivorans: a three-dimensional analysis of forelimb shape. *Journal of Evolutionary Biology* 26: 1521-1535. Citations = 74

I conceived the study, performed the entire data acquisition, analysed the data, and wrote the paper.

5. Polly PD, Lawing AM, **Fabre A-C**, Goswami A (2013) Phylogenetic principal components analysis and geometric morphometrics. *Hystrix* 24(1): 1-9. Citations = 128

I performed the entire acquisition of the data, did part of the analyses, and wrote the corresponding parts of the paper.

6. **Fabre A-C**, Cornette R, Perrard A, Boyer D, Prasad GVP, Hooker JJ, Goswami A (2014) A three-dimensional morphometric analysis of the locomotory ecology of *Deccanolestes*, a eutherian mammal from the late Cretaceous of India. *Journal of Vertebrate Paleontology* 34: 146-156. Citations = 10

I conceived the study, performed the entire data acquisition, analysed the data, and wrote the paper.

## Curriculum vitae Anne-Claire Fabre

7. **Fabre A-C**, Goswami A, Peigné S, Cornette R (2014) Morphological integration in the forelimb of musteloid carnivorans. *Journal of Anatomy* 225: 19-30. Citations = 54

I conceived the study, performed the entire data acquisition, analysed the data, and wrote the paper.

8. **Fabre A-C**, Cornette R, Goswami A, Peigné S (2015) Do constraints associated with the locomotor habitat drive the evolution of forelimb shape? A case study in musteloid carnivorans. *Journal of Anatomy* 226: 596-610. Citations = 57

I conceived the study, performed the entire data acquisition, analysed the data, and wrote the paper.

9. **Fabre A-C**, Salesa MJ, Cornette R, Antón M, Morales J, Peigné S (2015) Quantitative inferences on the locomotor behaviour of extinct species applied to *Simocyon batalleri* (Ailuridae, Late Miocene, Spain). *Science of Nature* 102: 30. Citations = 25

I conceived the study, performed the entire data acquisition, analysed the data, and wrote the paper.

- **Publications resulting from my postdoctoral time (46)**

10. **Fabre A-C**, Cornette R, Huyghe K, Andrade DV, Herrel A (2014) Linear versus morphometric approaches for the analysis of head shape dimorphism in lizards. *Journal of Morphology* 275: 1016-1026. Citations = 43

I conceived the study, performed the entire data acquisition, analysed the data, and wrote the paper.

11. Robovska-Havelkova P, Aerts P, Rocek Z, Prikryl T, **Fabre A-C**, Herrel A (2014) Do all frogs swim alike? The effect of ecological specialization on swimming kinematics in frogs. *Journal of Experimental Biology* 217: 3637-3644. Citations = 15

I performed part of the analyses and wrote the corresponding parts of the paper.

12. **Fabre A-C**, Andrade DV, Huyghe K, Cornette R, Herrel A (2014) Interrelationships between bones, muscles, and performance: biting in the lizard *Tupinambis meriana*. *Evolutionary Biology* 41: 518-527. Citations = 18

I conceived the study, performed the entire data acquisition, analysed the data, and wrote the paper.

13. Botton-Divet L, Houssaye A, Herrel A, **Fabre A-C**, Cornette R (2015) Tools for quantitative form description; an evaluation of different software packages for semi-landmark analysis. *PeerJ* 3: e1417. Citations = 29

I performed the acquisition of the data, parts of the analyses, and wrote the corresponding parts of the paper.

14. **Fabre A-C**, Bickford D, Segall M, Herrel A (2016) The impact of diet, habitat use, and behavior on head shape evolution in homalopsid snakes. *Biological Journal of the Linnean Society* 118: 634-647. Citations = 48

I conceived the study, performed the entire data acquisition, analysed the data, and wrote the paper.

## Curriculum vitae Anne-Claire Fabre

15. Dumont M, Wall CE, Botton-Divet L, Goswami A, Peigné S, **Fabre A-C** (2016) Do functional demands associated with locomotor habitat, diet, and activity pattern drive skull shape evolution in musteloid carnivorans? *Biological Journal of the Linnean Society* 117: 858-878. Citations = 53

I conceived the study, performed part of the acquisition of the data, did all the analyses, and wrote the paper.

16. Granatosky MC, Tripp CH, **Fabre A-C**, Schmitt D (2016) Patterns of quadrupedal locomotion in a vertical clinging and leaping primate (*Propithecus coquereli*) with implications for understanding the functional demands of primate quadrupedal locomotion. *American Journal of Physical Anthropology* 160: 644-652. Citations = 26

I participated in the acquisition of the data, did parts of the analyses and wrote the corresponding parts of the paper.

17. Segall M, Cornette R, **Fabre A-C**, Godoy-Diana R, Herrel A (2016) Does aquatic foraging impact head shape evolution in snakes? *Proceedings of the Royal Society B* 283: 20161645. Citations = 43

I participated in the acquisition of the data, did parts of the analyses, and wrote the corresponding parts of the paper.

18. Peckre L, **Fabre A-C\***, Wall CE, Brewer D, Ehmke E, Haring D, Shaw E, Welser K, Pouydebat E (2016) Holding-on: co-evolution between infant carrying and grasping behaviour in strepsirrhines. *Scientific Reports* 6: 37729. Citations = 19

I conceived the study, I performed the entire acquisition of the data, did parts of the analyses and co-wrote the paper with my student.

19. Botton-Divet L, Cornette R, **Fabre A-C**, Herrel A, Houssaye A (2016) Morphological analysis of long bones in semi-aquatic mustelids and their terrestrial relatives. *Integrative and Comparative Biology* 56: 1298-1309. Citations = 50

I performed part of the acquisition of the data, did parts of the analyses, and wrote the corresponding parts of the paper.

20. Dollion A, Measy GJ, Cornette R, Carne L, Tolley K, da Silva J, Boistel R, **Fabre A-C**, Herrel A (2017) Does diet drive the evolution of head shape and bite force in chameleons of the genus *Bradypodion*? *Functional Ecology* 31: 671-684. Citations = 33

I performed all the geometric morphometric analyses and wrote the corresponding parts of the paper.

21. Botton-Divet L, Cornette R, Houssaye A, **Fabre A-C**, Herrel A (2017) Swimming and running, a study of the convergences in long bone morphology among semi-aquatic mustelids (*Carnivora: Mustelidae*). *Biological Journal of the Linnean Society* 121: 38-49. Citations = 26

I performed part of the acquisition of the data and wrote the corresponding parts of the paper.

22. **Fabre A-C**, Marigó J, Granatosky MC, Schmitt D (2017) Functional associations between support use and forelimb shape in strepsirrhines and their relevance to inferring locomotor behavior in early primates. *Journal of Human Evolution* 108: 11-30. Citations = 22

## Curriculum vitae Anne-Claire Fabre

I conceived the study, performed the entire data acquisition, analysed the data, and wrote the paper.

23. Manzano A, Herrel A, **Fabre A-C**, Abdala V (2017) Variation in brain anatomy in frogs and its possible bearing on their locomotor ecology. *Journal of Anatomy* 231: 38-58. Citations = 15

I performed the statistical analyses and wrote the corresponding parts of the paper.

24. Abourachid A, **Fabre A-C**, Cornette R, Hofling E (2017) Foot shape in arboreal birds: two morphological patterns for the same pincer-like tool. *Journal of Anatomy* 231: 1-11. Citations = 8

I performed the geometric morphometric analyses and the corresponding parts of the paper.

25. Da Silva FO, **Fabre A-C**, Savriama Y, Ollonen J, Mahlow K, Herrel A, Müller J and N Di-Poï (2018) The ecological origins of snake as revealed by skull evolution. *Nature Communication* 9: 376. Citations = 68

I performed the analyses and wrote the corresponding parts of the paper.

26. Böhmer C, **Fabre A-C**, Herbin M, Peigné S, Herrel A (2018) Anatomical basis of differences in locomotor behavior in martens: a comparison of the forelimb musculature between two sympatric species of Martes. *The Anatomical Record* 301: 449-472. Citations = 17

I performed part of the data acquisition, the analyses and wrote the corresponding parts of the paper.

27. **Fabre A-C\***, Perry JMG, Harstone-Rose A, Lowie A, Boens A, Dumont M (2018) Do muscles constrain skull shape evolution in Strepsirrhines? *The Anatomical Record* 301: 291-310. Citations = 29

I conceived the study, performed the entire data acquisition, analysed the data, and wrote the paper.

28. Botton-Divet L, Houssaye A, A Herrel, **Fabre A-C**, Cornette R (2018) Swimmers, diggers, climbers and more, a study of integration across the mustelids' locomotor apparatus (Carnivora: Mustelidae). *Evolutionary Biology* 45: 182-195. Citations = 25

I performed part of the data acquisition and wrote some parts of the paper.

29. Lowie A, Herrel A, Abdala V, Manzano A, **Fabre A-C\*** (2018) Does locomotor ecology constrains the morphology of the forelimb flexor muscles in lizards? *The Anatomical Record* 301: 424-433. Citations = 11

I conceived the study, performed the entire data acquisition, analysed the data, and wrote the paper.

30. Abdala V, Ponssa ML, Tulli MJ, **Fabre A-C**, Herrel A (2018) Frog tendon structure and its relationship with locomotor modes. *Journal of Morphology* 279: 895-903. Citations = 11

I realized performed the phylogenetic comparative analyses and wrote the corresponding parts of the paper.

## Curriculum vitae Anne-Claire Fabre

31. Michaud M, Veron G, Peigné S, Blin A, **Fabre A-C\*** (2018) Are phenotypic disparity and the rate of morphological evolution correlated with ecological diversity in Carnivora? *Biological Journal of the Linnean Society* 124: 294-307. Citations = 11

I conceived the study, performed part of the data acquisition, all the analyses and co-wrote the paper with my PhD student.

32. Donihue CM, Herrel A, **Fabre A-C**, Kamath A, Geneva AJ, Schoener TW, Kolbe JJ and JB Losos (2018) Hurricane-induced selection on the morphology of an island lizard. *Nature* 560: 88-92. Citations = 85

I performed part of the acquisition of the data, participated in field work and wrote some parts of the paper.

33. **Fabre A-C**, Granatosky MC, Hanna JB and D Schmitt (2018) Do forelimb shape and peak forces co-vary in strepsirhines? *American Journal of Physical Anthropology* 167: 602-614. Citations = 8

I conceived the study, performed the entire data acquisition, analysed the data, and wrote the paper.

34. Taverne M, **Fabre A-C\***, Herbin M, Herrel A, Lacroux C, Lowie A, Pagès F, Peigné S, Theil J-C and C Bohmer (2019) Convergence in the functional properties of forelimb muscles in carnivorans: adaptations to an arboreal life-style? *Biological Journal of the Linnean Society* 125: 250-263. Citations = 15

I conceived the study, performed part of the data acquisition, all the analyses and co-wrote the paper with my student.

35. **Fabre A-C\***, Peckre L, Pouydebat E and C Wall (2019) Does the shape of the forelimb long bones covary with grasping behaviour in strepsirrhine primates? *Biological Journal of the Linnean Society* 127: 649-660. Citations = 7

I conceived the study, performed the entire data acquisition, analysed the data, and wrote the paper.

36. Peckre L, **Fabre A-C\***, Hambucker J, Wall CW and E Pouydebat (2019) Food properties influence grasping strategies in strepsirrhines. *Biological Journal of the Linnean Society* 127: 583-597. Citations = 4

I conceived the study, I performed the entire data acquisition, did part of the analyses, and co-wrote the paper with my student.

37. Böhmer C, **Fabre A-C\***, Taverne M, Herbin M, Peigné S and A Herrel (2019) Functional relationship between myology and ecology in carnivores: forelimb muscles reflect adaptation to prehensility. *Biological Journal of the Linnean Society* 127: 661-680. Citations = 13

I conceived the study, I performed part of the data acquisition of the data, all the analyses and wrote parts of the paper.

38. Abourachid A, Herrel A, Decamps T, Pagès F, **Fabre A-C\***, Van Hoorebeke L, Adriaens D and MA Garcia Amado (2019) Locomotion in Hoatzin nestlings: a new quadrupedal coordination for birds. *Science Advances* 5: eaat0787. Citations = 6

I helped acquire the data in the field and wrote some parts of the paper.

## Curriculum vitae Anne-Claire Fabre

39. Watanabe A, **Fabre A-C**, Felice RN, Maisano JA, Müller J, Herrel A and A Goswami (2019) Ecomorphological diversification in squamates from conserved pattern of cranial integration. *Proceedings of the National Academy of Sciences U S A* 116: 14688-14697.

Citations = 65

I performed parts of analyses and wrote some parts of the paper.

40. Pafilis P, Herrel A, Kapsalas G, Vasilopoulou-Kampitsi M, **Fabre A-C**, Foufopoulos J and CM Donihue (2019) Habitat shapes the thermoregulation in Mediterranean lizards introduced to replicates experimental islets. *Journal of Thermal Biology* 84: 368-374.

Citations = 1

I participated in the field work, helped with the data acquisition, and wrote some parts of the paper.

41. Wölfer J, Amson E, Arnold P, Botton-Divet L, **Fabre A-C**, van Heteren A and J Nyakatura (2019) Femoral morphology of sciuriform rodents in light of scaling and locomotor ecology. *Journal of Anatomy* 234: 731-747. Citations = 11

I taught and advised the student on geometric morphometrics and comparative analyses, I wrote parts of the paper.

42. Peckre LR, Lowie A, Brewer D, Ehmke E, Welser K, Shaw E, Wall C, Pouydebat E and **Fabre A-C\*** (2019) Food mobility and the evolution of grasping behaviour: a case study in strepsirrhine primates. *Journal of Experimental Biology* 222: jeb207688. Citations = 1

I conceived the study, I performed the entire data acquisition, did part of the analyses, and co-wrote the paper with my student.

43. Goswami A, Watanabe A, Felice RN, Bardua C, **Fabre A-C** and D Polly (2019) High-density morphometric analysis of shape and integration: the good, the bad, and the not-really-a-problem. *Integrative and Comparative Biology* icz120. Citations = 43

I help to the interpret the results of the analyses and wrote some parts of the paper.

44. Bardua C, Felice RN, Watanabe A, **Fabre A-C** and A Goswami (2019) A practical guide to surface sliding semi-landmarks in morphometric analyses. *Integrative Organismal Biology* doi:10.1093/iob/obz016. Citations = 44

I performed part of the data acquisition, did a part of the analyses, and wrote some parts of the paper.

45. Taverne M, **Fabre A-C**, King-Gillies N, Krajnović M, Lisičić D, Martin L; Michal L, Petricioli D, Stambuk A, Tadić Z, Vigliotti C, Wehrle B and A Herrel (2019) Diet variability among insular populations of *Podarcis* lizards reveals diverse strategies to face resource-limited environments. *Ecology and Evolution* 9: 12408-12420. Citations = 6

I participated in the field work, performed part of the data acquisition, helped with analyses, and wrote some parts of the paper.

46. Pagès F, **Fabre A-C\*** and Abourachid A (2019) Does bone preparation impact its shape: consequences for comparative analyses of bone shape. *PeerJ* 7: e7932 DOI 10.7717/peerj.7932. Citations = 1

I performed part of the analyses and co-wrote the paper with my PhD student.



## Curriculum vitae Anne-Claire Fabre

47. Salesa MJ, Siliceo G, Anton M, **Fabre A-C** and JF Pastor (2020) Functional inferences on the long bones of *Ischyriactis zibethoides* (Blainville, 1841) (Carnivora, Mustelidae) from the middle Miocene locality of Sansan (Gers, France). *Geodiversitas* 42:1-16. Memorial to Stéphane Peigné – Carnivores (Hyaenodonta and Carnivora) of the Cenozoic. Citations = 2

I performed part of the data acquisition of the data and wrote parts of the paper.

48. Bon M, Bardua C, Goswami A and **A-C Fabre\*** (2020) Cranial integration in the fire salamander, *Salamandra salamandra* (Caudata: Salamandridae). *Biological Journal of the Linnean Society* 130:178-194. Citations = 9

I conceived the study, I performed a part of the data acquisition, did parts of the analyses and co-wrote the paper with my student.

49. Donihue CM, Kowaleski AM, Losos JB, Algard AC, Baeckens S, Buchkowski RW, **Fabre A-C**, Frank HK, Geneva AJ, Reynolds RG, Stroud JT, Velasco JA, Kolbe JJ, Mahler DL and A Herrel (2020). Hurricane effects on Neotropical lizards span geographic and phylogenetic scales. *Proceedings of the National Academy of Sciences U S A* 117:10429-10434.

Citations = 24

I participated in the field work, performed part of the data acquisition, and wrote some parts of the paper.

50. Bardua C, **Fabre A-C\***, Bon M, Das K, Stanley EL, Blackburn DC and A Goswami (2020) Evolutionary integration of the frog cranium. *Evolution* 74:1200-1215. Citations = 12

I performed parts of the analyses and wrote some parts of the paper.

51. **Fabre A-C\***, Bardua C, Bon M, Clavel J, Felice RN, Streicher JW, Bonnel J, Stanley EL, Blackburn DC, and A Goswami (2020) Metamorphosis shapes cranial diversity and rate of evolution in salamanders. *Nature Ecology and Evolution* 4:1129-1140. Citations = 20

I conceived the study, I performed the entire acquisition of the data, most of the analyses, and wrote the paper.

52. Michaud M., Veron G and **A-C Fabre\*** (2020) Phenotypic integration in feliform carnivores: Covariation patterns and disparity in hypercarnivores versus generalists. *Evolution* 74-12: 2681-2702. Citations = 8

I conceived the study, performed part of the data acquisition, all the analyses and co-wrote the paper with my PhD student.

53. Fouquet A, Leblanc K, Framit M, Réjaud A, Rodrigues MT, Castroviejo-Fisher S, Peloso PLV, Prates I, Manzi S, Suescun U, Baroni S, Moraes LJCL, Recoder R, de Souza SM, Dal Vecchio F, Camacho A, Guellere JM, Rojas-Runjaic FJM, Gagliardi-Urrutia G, de Carvalho VT, Gordo M, Menin M, Kok PJR, Hrbek T, Werneck FP, Crawford AJ, Ron SR, Mueses-Cisneros JJ, Rojas Zamora RR, Pavan D, Simões PI, Ernst R and **A-C Fabre\*** (2021) Species diversity and biogeography of an ancient frog clade from the Guiana Shield (Anura: Microhylidae: *Adelastes*, *Otophryne*, *Synapturanus*) exhibiting spectacular phenotypic diversification. *Biological Journal of the Linnean Society. Biological Journal of the Linnean Society* 132: 233-256. Citations = 6

I conceived the study, performed part of the data acquisition, all the analyses and co-wrote the paper with my student.

## Curriculum vitae Anne-Claire Fabre

54. **Fabre A-C**, Dowling C, Portela Miguez R, Fernandez V, Noirault E and A Goswami (2021) Functional constraints during development limit jaw shape evolution in marsupials. *Proceedings of the Royal Society B* 288:20210319. Citations = 6

I conceived the study, I performed the entire acquisition of the data, most of the analyses, and wrote the paper.

55. Bardua C, **Fabre A-C\***, Clavel J, Bon M, Das K, Stanley EL, Blackburn DC and A. Goswami (2021) Size, microhabitat, and loss of larval feeding drive cranial diversification in frogs. *Nature Communications* 12:2403. Citations = 7

I performed part of the data acquisition, analyses and co-wrote part of the paper.

56. Huntley L, Gower DJ, Sampaio FL, Collins ES, Goswami A and **A-C Fabre\*** (2021) Intraspecific morphological variation in the shieldtail snake *Rhinophis philippinus* (Serpentes: Uropeltidae), with particular reference to tail-shield and cranial 3D geometric morphometrics. *Journal of Zoological Systematics and Evolutionary Research* 59:1357-1370. Citations = 0

I conceived the study, performed part of the data acquisition, all the analyses and co-wrote the paper with my PhD student.

57. Taverne M, Dutel H, Fagan M, Stambuk A, Lisicic D, Tadic Z, **Fabre A-C** and A Herrel (2021) From micro to macroevolution: drivers of shape variation in island radiation of *Podarcis* lizards. *Evolution* 75-11: 2685-2707. Citations = 1

I participated in the field work, performed part of the data acquisition, and wrote some parts of the paper.

58. **Fabre A-C**, Portela Miguez R, Wall CE, Peckre LR, Ehmke E and R Boistel (2021) A review of nose picking in primates with new evidence of its occurrence in *Daubentonia madagascariensis*. *Journal of Zoology* doi:10.1111/jzo.13034

I conceived the study, performed part of the data acquisition, all the analyses and wrote the paper.

59. Goswami A, Noirault E, Coombs EJ, Clavel J, **Fabre A-C**, Halliday TJD, Churchill M, Curtis A, Watanabe A, Simmons NB, Beatty BL, Geisler JH, Fox DL and RN Felice. *Science* 10.1126/science.abm7525

I performed part of the data acquisition and analyses and co-wrote the paper.

### PEER-REVIEWED BOOKS and book chapters (2)

Böhmer C, Theil J-C, **Fabre A-C**, Herrel A (2020) *Atlas of terrestrial mammal limbs*. Taylor & Francis Group, LLC

Herrel A, O'Reilly JC, **Fabre A-C**, Bardua C, Boistel R and S Gorb (2019) Feeding in amphibians: evolutionary transformations and phenotypic diversity as drivers of feeding system diversity. In: *Feeding in Vertebrates: Evolution, Morphology, Behavior, Biomechanics* (Eds. Bels VL & IQ Wishaw). Springer Verlag. Pp. 431-467

### CONTRIBUTIONS TO BOOKS (1)

**Fabre A-C**, Peigné S and M Salesa (2017) Reconstrucción de los hábitos locomotores de *Simocyon batalleri*. In *Catálogo exposición Cerro Batallones*. Pp. 260-263

### PEER-REVIEWED CONFERENCE PROCEEDINGS (32)

## Curriculum vitae Anne-Claire Fabre

- Fabre A-C**, Cornette R, Prasad G, Boyer D, Goswami A (2011) A 3-D morphometric analysis of the locomotory ecology of *Deccanolestes*, a eutherian mammal from the Late Cretaceous of India. *Journal of Vertebrate Paleontology* **31**(2): 106-106. Society of Vertebrate Paleontology (SVP), Las Vegas, NV.
- Fabre A-C**, Slater G, Cornette R, Peigné S, Goswami A, Pouydebat E (2013) Getting a grip on grasping in carnivorans: a three-dimensional analysis of forelimb shape. *Integrative and Comparative Biology* **53**(1): E66-E66. Annual Meeting of the Society for Integrative and Comparative Biology (SICB), San Francisco, CA.
- Fabre A-C**, Goswami A, Peigné S, Cornette R (2014) Morphological integration in the forelimb of musteloid carnivorans. *Integrative and Comparative Biology* **54**(1): E60-E60. SICB, Austin, TX
- Peckre L, Pouydebat E, Herrel, A, Wall C, **Fabre A-C** (2015) The Evolution of Manipulation Behaviour in Strepsirrhines. *Folia Primatologica* **86**(4):336-337. The European Federation for Primatology (EFP), Roma, Italy.
- Fabre A-C**, Peckre, L, Wall, C, Herrel, A, Pouydebat, E (2015) Influence of Grasping Ability on Forelimb Long Bone Shape in Prosimians. *Folia Primatologica* **86**(4):277-277. EFP, Roma, Italy.
- Fabre A-C**, Peckre, L, Brewer, D, Ehmke, E, Wesler, K, Pouydebat, E, Wall, CE (2016) Influence of grasping ability on forelimb long bone shape in Prosimians. *Integrative and Comparative Biology* **56**(1): E62-E62. SICB, Portland, OR
- Botton-Divet L, Cornette R, Herrel A, **Fabre A-C**, Houssaye A (2016) Is the forelimb of semi-aquatic mustelids adapted to locomotion in different environments? A morphometric study. *Integrative and Comparative Biology* **56**(1): E21-E21. SICB, Portland, OR
- Botton-Divet L, Cornette R, **Fabre A-C**, Herrel A, Houssaye A (2016) Morphological analysis of long bones in semi-aquatic mustelids and their terrestrial relatives. *Integrative and Comparative Biology* **56**(6): 1298-1309. SICB, Portland, OR
- Eveno A, **Fabre A-C**, Bardo A, Guery, J-Pa, Pouydebat E (2016) Grasping in platyrrhines: variability explained by arborealism, phylogeny, or claws versus nails? *Folia Primatologica* **88**(2):178-179. EFP, Strasbourg, France.
- Marigo J, **Fabre A-C**, Boyer D M (2016) What can the shape of the calcaneus tell us about locomotion in extinct primates? *Folia Primatologica* **88**(2):156-157. EFP, Strasbourg, France.
- Fabre A-C**, Dumont M, Wall C E, Dumont E, Godfrey L, Herrel A (2016) geometric morphometric approaches to infer bite force and diet in extinct strepsirrhines. *Folia Primatologica* **88**(2):156-156. EFP, Strasbourg, France.
- Fabre A-C**, Peckre L, Eveno A, Bardo A, Wall C E., Brewer D, Ehmke E, Welser K, Pouydebat E (2016) Coevolution between grasping ability and forelimb shape in Strepsirrhines and Platyrrhines. *Folia Primatologica* **88**(2):141-141. EFP, Strasbourg, France.
- Boehmer C, **Fabre A-C**, Lacroux C, Herbin M, Peigne S, Herrel A (2016) Forelimb musculature, arboreal locomotion and substrate use in primates. *Folia Primatologica* **88**(2):142-142. EFP, Strasbourg, France.
- Peckre L, **Fabre A-C**, Wall C, Pouydebat E (2016) The evolution of hand-grasping behaviours among Strepsirrhines. *Folia Primatologica* **88**(2):137-137. EFP, Strasbourg, France.
- Fabre A-C**, Dumont M, Wall C E, Brewer D, Ehmke E, Welser K, Dumont E, Godfrey L, Herrel A (2017) Geometric morphometric approaches to inferring bite force and diet in extinct strepsirrhines. *Integrative and Comparative Biology* **57**(1):E256-E256. SICB, New Orleans, LA.
- Marigo J, **Fabre A-C**, Verriere N, Godinot M (2019) Can the humeri of the *Adapis* group shed new light on the locomotor repertoire of these early primates? New data using 3D Geometric

## Curriculum vitae Anne-Claire Fabre

- Morphometrics on the distal humerus. *American Journal of Physical Anthropology* **168**(68):154-155. Annual Meeting of the American Association of Physical Anthropologists (AAPA), Cleveland, OH.
- Woelfer J, Amson EA, Arnold P, Botton-Divet L, **Fabre A-C**, Vanheteren AH, Nyakatura J (2019) Does scaling of morphology depend on locomotor ecology? The case of the sciuriform rodent femur. *Integrative and Comparative Biology* **59**(1):E250-E250. SICB, Tampa, FL.
- Taverne M, **Fabre A-C**, Dutel H, Tadic Z, Fagan M, Herrel A (2019) Phenotypic diversification in insular populations of *Podarcis* lizards: how do diet and bite force drive variation in skull morphology? *Integrative and Comparative Biology* **59**(1):E228-E228. SICB, Tampa, FL.
- Pages F, **Fabre A-C**, Herrel A, Abourachid A (2019) Morpho-functional trade-off between physiology and flying ability in birds. *Integrative and Comparative Biology* **59**(1):E178-E178. SICB, Tampa, FL.
- Goswami A, Watanabe A, Felice RN, Bardua C, **Fabre A-C**, Polly PD (2019) Phenomic approaches to analysing integration in complex systems and across diverse taxa: the good, the bad, and the ugly. *Integrative and Comparative Biology* **59**(1):E84-E84. SICB, Tampa, FL.
- Fabre A-C**, Bardua C, Bonnel J, Blackburn D, Goswami A (2019) Morphological Integration of the Head in Salamanders: Impact of Developmental Strategy and Ecology. *Integrative and Comparative Biology* **59**(1):E65-E65. SICB, Tampa, FL.
- Botton-Divet L, Houssaye A, Herrel A, **Fabre A-C**, Cornette R (2019) Integration Across the Mustelids' Locomotor Apparatus (Carnivora: Mustelidae). *Integrative and Comparative Biology* **59**(1):E276-E276. SICB, Tampa, FL.
- Taverne M, **Fabre A-C**, Dutel H, Tadic Z, Fagan MJ, Herrel A (2019) Does the diversity in skull morphology and jaw musculature reflect the functional constraints associated with resource use? insights from insular *Podarcis* lizards. *Journal of Morphology* **280**(1):S64-S64. International Congress of Vertebrate Morphology (ICVM), Prague, Czech Republic.
- Pages F, **Fabre A-C**, Herrel A, Abourachid A (2019) What Can Wing and Girdle Shape in Birds Tell us about the Flying Ability of the Hoatzin? *Journal of Morphology* **280**(1):S195-S195. ICVM, Prague, Czech Republic.
- Michaud M, Veron G, **Fabre A-C** (2019) Phenotypic Integration in Carnivores: Covariation Patterns in Species with Hypercarnivorous versus Generalist Diet in Feliformia. *Journal of Morphology*. **280**(1):S179-S179. ICVM, Prague, Czech Republic.
- Holte SE, **Fabre A-C** (2019) Arboreality Constraints on Forelimb Shape Evolution in Carnivorans and Primates. *Journal of Morphology* **280**(1):S42-S42. ICVM, Prague, Czech Republic.
- Herrel A, **Fabre A-C**, Zablocki-Thomas P, Boistel R, Measey G J, Dollion A Y, Luger A M, Adriaens D, Anderson CV, Tolley KA (2019) Manual and tail prehensile systems in vertebrates: performance and morphology. *Journal of Morphology* **280**(1):S44-S45. ICVM, Prague, Czech Republic.
- Goswami A, Bardua C, Watanabe A, **Fabre A-C**, Randau M, Marshall A, Bon M, Noirault E, Felice R N (2019) Assessing the macroevolutionary consequences of phenotypic integration with dense phenomic data from living and extinct tetrapods. *Journal of Morphology* **280**(1):S14-S15. ICVM, Prague, Czech Republic.
- Fabre A-C**, Bardua C, Felice R, Blackburn D, Stanley E, Bonnel J, Streicher J, Goswami A (2019) Morphological integration of the head in salamanders: Impact of developmental strategy and ecology. *Journal of Morphology* **280**(1):S117-S117. ICVM, Prague, Czech Republic.

## Curriculum vitae Anne-Claire Fabre

- Fabre A-C**, Clavel J, Courtois E, Lowie A, Moureaux C, Herrel A (2019) Grip it or stick it: Frog adaptations to arboreal environments. *Journal of Morphology* **280**(1):S41-S41. ICVM, Prague, Czech Republic.
- Fabre A-C**, Bardua C, Clavel J, Felice RN, Bonnel J, Blackburn D, Stanley E, Streicher J, Goswami A (2020) Morphological evolution of the head of Caudata is correlated to rapid diversification and dispersion during warming events. *Integrative and Comparative Biology* **60**(1):E66-E66. SICB, Austin, TX.
- Fabre A-C**, Noirault E, Fernandez V, Portela-Miguez R, Goswami A (2020) Morphological integration of the skull in marsupials: impact of diet and locomotion. *Integrative and Comparative Biology* **60**(1):E316-E316. SICB, Austin, TX.
- Bardua C, Bon M, **Fabre A-C**, Das K, Herrel A, Stanley E L, Blackburn D C, Goswami A (2020) Macroecology and Morphological Evolution of the Frog Skull. *Integrative and Comparative Biology* **60**(1):E11-E11. SICB, Austin, TX.
- Dutel H, Porro LB, **Fabre A-C**, Martin-Siverstone E, Berks H, Fagan MJ and Rayfield EJ (2021) Functional evolution of the skull during the fish-tetrapod transition: insight from living vertebrates. *Integrative and Comparative Biology* **60**(1):E11-E11. SICB, *Integrative and Comparative Biology* SICB, Virtual meeting.

### ORAL CONTRIBUTIONS AT CONFERENCES (TALKS OR POSTERS)

#### *CONFERENCES (only first author conferences are listed here)*

##### **KEYNOTE SPEAKER (4)**

**Fabre A-C** (2019) How *in vivo* data on extant species can shed light on the paleoecology of extinct species? 4<sup>th</sup> IMERP, Cuenca, Spain, June 11-14

**Fabre A-C** (2021) Functional constraints during development as driver or brake of morphological diversity? e-jam21, Argentina, online, November 16-19

**Fabre A-C** (2022) I used to be an axolotl... the impact of metamorphosis on the morphological and functional diversity of feeding structures in Caudata. 114<sup>th</sup> Meeting of the German Zoological Society, Bonn, Germany, 13-16 September

**Fabre A-C** (2022) Deciphering the evolution of the incredible morphological and functional diversity in mustelids. 34<sup>th</sup> European Mustelid Colloquium, online, 14-16 September

##### **INVITED SYMPOSIUM PRESENTATIONS (11)**

**Fabre A-C**, Salesa MJ, Cornette R, Antón M, Morales J, Peigné S (2015) Quantitative inferences on the locomotor behavior of extinct species: new insights from 3D surface geometric morphometrics approaches, 75<sup>th</sup> SVP, Dallas, Texas, USA; October 14-17

**Fabre A-C**, Peckre L, Wall CE, Herrel A, Pouydebat E (2015) Influence of grasping ability on forelimb long bone shape in Prosimians. 6<sup>th</sup> EFP, Roma, Italy; August 25-28

**Fabre A-C**. The evolution of prehensile behaviour and forelimb morphology in prosimians (2016) 50<sup>th</sup> Anniversary Symposium in celebration of the Duke Lemur Center, September 21-23

**Fabre A-C**, Dumont M, Wall CE, Brewer D, Ehmke E, Welser K, Herrel A (2016) Does bite force matter in shaping the head of strepsirrhines primates, ASM, Minneapolis, MN; June 24-28

**Fabre A-C**, Dumont M, Wall CE, Dumont E, Godfrey L, Herrel A (2017) Geometric morphometric approaches to infer bite Force and diet in extinct strepsirrhines. 7<sup>th</sup> EFP, Strasbourg, France; August 24

## Curriculum vitae Anne-Claire Fabre

- Fabre A-C**, Peckre L, Eveno A, Bardo A, Wall CE, Brewer D, Ehmke E, Welser K, Pouydebat E (2017) Coevolution between grasping ability and forelimb shape in strepsirrhines and platyrrhines. 7th EFP, Strasbourg, France; August 22
- Fabre A-C**, Dumont M, Wall CE, Herrel A (2017) Geometric morphometric approaches to infer bite force and diet in extinct strepsirrhines. Symposium in EAVP, Munich, Germany, August 2
- Fabre A-C**, Dumont M, Herrel A, Wall C (2018) Can studies on the interplay between the musculo-skeletal system and performance shed light on the paleoecology of extinct species? 5th International Palaeontological congress, Paris, France; July 12
- Fabre A-C**, Clavel J, Courtois E, Lowie A, Moureaux C, Herrel A (2019) Grip it or Stick it: Frog Adaptations to Arboreal Environments. ICVM, Prague, Czech Republic; July 21-25
- Fabre A-C**, Bardua C, Bon M, Clavel J, Felice RN, Streicher JW, Bonnel J, Stanley EL, Blackburn DC and A Goswami (2020). Metamorphosis and the evolution of morphological diversity in salamanders. I Meeting of Systematics, Biogeography and Evolution (SBE). Online meeting, July 29-30.
- Fabre A-C**, Dominic Stalder and Marcelo R. Sánchez-Villagra (2021) A morphometric study of skull variation in Goldfishes: Morphospace expansion through domestication. Invited talk in the symposium "Progresses on goldfish research: macro-phenotype evolution under artificial selection". The 2nd AsiaEvo Conference, August 16-19, 2021.

### **ORAL PRESENTATIONS**

- Fabre A-C**, Cornette R, Baylac M, Peigné S (2011) Morpho-functional study of the vertebral column of the Carnivora (Mammalia): approach by the tridimensional geometric morphometrics. SMEF, Montpellier, France; May 27-28
- Fabre A-C**, Cornette R, Delapre A, Baylac M, Keovichit K, Hugot J-P (2011) Populational and geographical study of a relictual rodent from the Laos (*Laonastes aenigmamus*). 3D study of its skull and its mandible. VIth ECM, Paris, France; July 19-23
- Fabre A-C**, Slater G, Cornette R, Peigné S, Goswami A, Pouydebat E (2012) Getting a grip on the evolution of grasping in carnivores: a three-dimensional analysis of forelimb shape. ISF, Paris, France; November 28-30
- Fabre A-C**, Cornette R, Goswami A, Peigné S (2013) Influence of locomotor style on the shape of the forelimb in musteloid carnivorans. ICVM, Barcelona, Spain; July 8-13
- Fabre A-C**, Slater G, Cornette R, Peigné S, Goswami A, Pouydebat E (2013) Getting a grip on the evolution of grasping in carnivores: a three-dimensional analysis of forelimb shape. SICB, San Francisco, USA; January 3-7
- Fabre A-C**, Goswami A, Peigné S, Cornette R (2014) Morphological integration in the forelimb of musteloid carnivorans. SICB, Austin, USA; January 3-7
- Fabre A-C**, Cornette R, Peigné S, Goswami A, Dumont M (2015) What influences the shape of the skull in musteloids carnivorans? 6th CCS, Ghent, Belgium; July 7-10
- Fabre A-C**, Peckre L, Wall C, Herrel A, Pouydebat E (2015) Influence of grasping ability on forelimb long bone shape in Prosimians. 6th EFP, Roma, Italy; August 25-28
- Fabre A-C**, Granatosky MC, Hanna J, Schmitt D (2016) Coevolution between forelimb shape and loading regime in strepsirrhines. ICVM, Washington DC, USA; 29 June- 4 July
- Fabre A-C**, Peckre L, Brewer D, Ehmke E, Welser K, E Pouydebat, Wall CE (2016) Influence of grasping ability on forelimb long bone shape in Prosimians. SICB, Portland, USA; January 3-7

## Curriculum vitae Anne-Claire Fabre

- Fabre A-C**, Peckre L, Wall CE, Pouydebat E (2016) Influence des comportements de saisie sur la morphologie du membre antérieur des lémuriers. 9th SMEF, Paris, France; June 1-2
- Fabre A-C**, Marigó J, Granatosky MC, Schmitt D (2016) Functional associations between substrate use and forelimb shape in strepsirrhines and its relevance to inferring locomotor behavior in early primates. II ISGM, Madrid, Spain; June 9-10
- Fabre A-C**, Dumont M, Wall C, Brewer D, Ehmke E, Welser K, Dumont E, Godfrey L, Herrel A (2016) Geometric morphometric approaches to inferring bite force and diet in extinct strepsirrhines. Zoology, Antwerp, Belgium; December 15-17
- Fabre A-C**, Dumont M, Wall C, Brewer D, Ehmke E, Welser K, Dumont E, Godfrey L, Herrel A (2017) Geometric morphometric approaches to inferring bite force and diet in extinct strepsirrhines. SICB, New Orleans, USA; January 4-8
- Fabre A-C**, Bardua C, Clavel J, Felice RN, Bonnel J, Blackburn D, Stanley E, Streicher J, Goswami A. (2019) Morphological evolution of the head of caudata is correlated to rapid diversification and dispersion during warming events. SVP, Brisbane, Australia; October 9-12
- Fabre A-C**, Bardua C, Bonnel J, Blackburn D, Goswami A (2019) Morphological Integration of the Head in Salamanders: Impact of Developmental Strategy and Ecology. SICB, Tampa, USA; January 3-7
- Fabre A-C**, Bardua C, Clavel J, Felice RN, Bonnel J, Blackburn D, Stanley E, Streicher J, Goswami A. (2020) Morphological evolution of the head of caudata is correlated to rapid diversification and dispersion during warming events. SICB, Austin, Texas; January 3-7
- Fabre A-C**, Amine R, Dutel H, Raffaëlli J, Fröbisch N, Herrel H. (2022) I used to be an axolotl... the impact of metamorphosis on the kinematics and the anatomy of feeding structures in salamanders. SICB, Phoenix, Arizona; January 3-7

### **POSTER PRESENTATIONS**

- Fabre A-C**, Cornette R, Baylac M, Argot C, Herrel A, Goswami A, Peigné S (2011) What are the influences that shape the craniocervical system of the Carnivora Musteloidea (Mammalia)? 5th CCS, France
- Fabre A-C**, Cornette R, G Prasad, D Boyer and A Goswami (2011) A 3-D morphometric analysis of the locomotory ecology of *Deccanolestes*, a eutherian mammal from the late Cretaceous of India. 71st SVP, USA
- Fabre A-C**, Cornette R, Baylac, Peigné S (2011) Morpho-functional study of the vertebral column of small carnivoran: 3D landmark surface approach. ECM, France
- Fabre A-C**, Dumont M, Wall C, Brewer D, Ehmke E, Welser K, Dumont E, Godfrey L, Herrel A (2016) Geometric morphometric approaches to inferring bite force and diet in extinct strepsirrhines. 50th Anniversary Symposium in celebration of the Duke Lemur Center
- Fabre A-C**, Bardua C, Felice R, Blackburn D, Stanley E, Bonnel J, Streicher J, Goswami A (2019) Morphological Integration of the Head in Salamanders: Impact of Developmental Strategy and Ecology. ICVM, Prague, Czech Republic; July 21-25
- Fabre A-C**, Noirault E, Fernandez V, Portela Miguez R, Goswami A (2020) Morphological integration of the skull in marsupials: impact of diet and locomotion. SICB, Austin, Texas; January 3-7

### **ORGANISATION OF MEETINGS/SYMPOSIA**

Symposium Organiser: Holding on: the evolution of arboreality in tetrapods, 2019 International Congress of Vertebrate Morphology, Prague, July 21-25

## Curriculum vitae Anne-Claire Fabre

### INVITED DEPARTMENTAL SEMINARS

Field Museum, Chicago, USA (2022); PIM, University of Zurich, Switzerland (2022); Bern University, Bern, Switzerland (2022); Museum fur Naturkunde, Berlin, Germany (2022); University of Bristol, Bristol, UK (2022); Evolution Seminar, Bielefeld, Germany (2021); Universidad Nacional Autónoma de México, Mexico, Mexico (2021); Museum fur Naturkunde, Berlin, Germany (2021); Harvard University, Cambridge, USA (2020); University of Bristol, Bristol, UK (2020); University of Roehampton, London, UK (2019); University of Liège, Liège, Belgique (2019); Université de Montpellier, Montpellier, France (2019); Museum National d'Histoire Naturelle, Paris, France (2015); Hull York Medical School, York, UK (2013); Museum National d'Histoire Naturelle, Paris, France (2013)

### TEACHING AND KNOWLEDGE TRANSFER

BIO 267 Zurich University, Zurich, Switzerland. I supervised three hours of presentation and discussion of 18 recent publications by students in the module "Paleobiology and Evolution of Vertebrates", 2020.

BIO 266 Zurich University, Zurich, Switzerland. Two-hour mini course on paleoichnology and dinosaur tracks in Switzerland in the module "Fieldwork in European Palaeontology and Natural History Museums", 2020.

BIOL0808-2 University of Liège, Belgium. Two-hour mini course on the functional morphology of the forelimb in the module "Morphologie fonctionnelle", 2019

PALE0209 University of Liège, Belgium. Two-hour mini course on how to use in vivo data to reconstruct the paleoecology of extinct species in the module "Paléontologie animale", 2019

Museum National d'Histoire Naturelle, Paris, France. A one-day course and training on surface geometric morphometrics in the module "Morphométrie et analyses des formes", co-organiser, 2010-2013

GEOL3036 University College London, London, the United Kingdom, five-hour mini course on how to use comparative analyses with geometric morphometric data in the module "Biodiversity and Macroevolutionary Patterns", 2012

HerpTalks 2022, Universiteit Antwerpen, Antwerp, Belgium, 1-hour mini course on Identifying how life cycle variation drives morphological and functional diversity in salamanders, 2022

### SUPERVISION OF JUNIOR RESEARCHERS

I have co-supervised a total of one postdoctoral researcher, five Ph.D students (Ph.D), 20 Master (M.Sc), and 7 bachelor (B.Sc) students:

Postdoctoral researcher: Dr Vivien Louppe, University of Bern / Naturhistorisches Museum der Burgergemeinde Bern, Bern, Switzerland, 2022-2025

Ph.D.: Isabelle Toussaint, University of Bern / Naturhistorisches Museum der Burgergemeinde Bern, Bern, Switzerland, 2022-2026

Ph.D.: Mallaury Rollet, University of Bern / Naturhistorisches Museum der Burgergemeinde Bern, Bern, Switzerland, 2022-2026

Ph.D.: Anais Duhamel, Ecole Normale Supérieure Lyon, Lyon, 2022-2025.



## Curriculum vitae Anne-Claire Fabre

Ph.D.: Margot Michaud, Museum National d'Histoire Naturelle, France, 2016-2019  
Ph.D.: Fanny Pagès, Museum National d'Histoire Naturelle, France, 2016-2019  
M.Sc: Anaïs Duhamel, MfN, Berlin, co-supervisors: N. Fröbisch, 2022  
M.Sc: Mallauray Rollet, MNHN, Paris, co-supervisors: A. Herrel, 2022  
M.Sc: Isabelle Toussaint, MNHN, Paris, co-supervisors: A. Herrel, 2022  
M.Sc: Ryadh Amine, ESPCI, France, 2021  
M.Sc: Oriol Monclús Gonzalo, Institut Català de Paleontologia Miquel Crusafont, Spain, 2020  
M.Sc: Carys Dowling, University College London, UK, 2020  
M.Sc: Lucy Huntley, University College London, UK, 2020  
M.Sc: Sarah Cockerill, University College London, UK, 2020  
M.Sc: Killian Leblanc, Museum National d'Histoire Naturelle, France, 2019  
M.Sc: Margot Bon, The Natural History Museum, London, UK, 2019  
M.Sc: Anna Zango, University of Göttingen, Germany, 2018  
M.Sc: Valentine Chummum, Museum National d'Histoire Naturelle, France, 2017  
M.Sc: Camille Lacroux, Museum National d'Histoire Naturelle, France, 2017  
M.Sc: Maxime Taverne, Museum National d'Histoire Naturelle, France, 2017  
M.Sc: Aurélien Lowie, Museum National d'Histoire Naturelle, France, 2016-2017  
M.Sc: Cécile Moureaux, Museum National d'Histoire Naturelle, France, 2016  
M.Sc: Margot Michaud, Museum National d'Histoire Naturelle, France, 2016  
M.Sc: Louise Peckre, Museum National d'Histoire Naturelle, France, 2015  
M.Sc: Anne Vazeille, Museum National d'Histoire Naturelle, France, 2013  
M.Sc: Livia Basher, Museum National d'Histoire Naturelle, France, 2011  
B.Sc: Dominic Stalder, University of Zurich, 2021  
B.Sc: Lise Le Vern, Brest University, 2017  
B.Sc: Grégoire bousens-dumon, Agroparistech, 2017  
B.Sc: Edgard Richet, Lille University, 2016  
B.Sc: Raphael Lahrer, Lille University, 2016  
B.Sc: Andy Boens, Lille University, 2016  
B.Sc: Nina King-Gillies, Orsay (Paris XI), France, 2016

### CONTRIBUTIONS TO ONLINE REPOSITORIES AND TO BIG DATA

I actively contribute to [Phenome10K](#) and MorphoSource ([Mathication project](#); [META-MORPHOSIS project](#)) since their creation by sharing the 3D scans that I use in my studies. The 3D scans can be downloaded by anyone and used for research, education, or outreach. The functional and behavioural data that I acquired as well as the scripts and new functions that I use are also available in the supplementary information of the papers and/or on dryad or github (<https://github.com/anjoswami/salamanders>).

### ACADEMIC SERVICE

Reviewer for: Evolution, Biological Journal of the Linnean Society, PlosOne, Journal of Mammalogy, Mammalian Biology, The Anatomical Record, Zoologia, The Herpetological Journal, PeerJ, Organisms Diversity and Evolution, Journal of Anatomy, Journal of Morphology, Evolutionary Biology, Journal of Mammalian Evolution, Journal of Zoology, Current Zoology, Evolutionary Ecology...

### THESIS EXAMINATION & ADVISORY COMMITTEE

## Curriculum vitae Anne-Claire Fabre

Aurelien Lowie (Ghent University – Ghent, Belgium) PhD defense November 2022.

External examiner for the thesis:

Marjorie Roscian (MNHN – Paris, France) PhD defense December 2021.

External examiner for the thesis: “Morphologies et fonctions des mâchoires de céphalopodes”

Alessia HUBY (FNRS – Université de Liège, Belgium) PhD defense September 2021.

External examiner for the thesis: “How evolved that mouth: a functional morphological approach to unravel the evolutionary history of trophic shift between herbivory and carnivory in Serrasalmidae (Teleostei: Characiformes)”

Rohan Mansuit (MNHN – Paris, France) PhD defense November 2020.

External examiner for the thesis: “Etude morpho-fonctionnelle des nageoires pectorales du coelacanthé actuel *Latimeria* - considérations sur les modalités de la terrestrialisation des vertébrés”

Menelia Vasilopoulou-Kampitsi (Universiteit Antwerpen – Antwerpen, Belgium) Viva February 2020

External examiner for the thesis: “Ecological and functional morphology of locomotion of lacertid lizards”

Jack Kirkpatrick McMinn (University of Cambridge – Cambridge, UK) Viva October 28 2019

External examiner for the thesis: “Is inter-individual relatedness evident in hard tissue morphometrics?”

Maxime Taverne (MNHN – Paris, France) 2017 – 2020

External advisor for the thesis: “Engineering approach to understand the functional and ecological implications of small-scale morphological variation in an evolutionary context”

Quentin Martinez (Université de Montpellier – Montpellier, France) 2017 – Present.

External advisor for the thesis: “Olfaction chez les rongeurs et eulipotyphla”

Narimane Chatar (University of Liège – Liège, Belgium) Viva June 27 2019

External examiner for the master thesis: “Disparity of the mandible of primitive sabre-toothed felids from the late Miocene of Batallones (Spain)”

Margot Bernardi (Université de Bourgogne – Dijon, France) 2015 – Present

External advisor for the thesis: “L’audition chez les Primates : entre forme, fonction, écologie et comportement”

Léo Botton-Divet (MNHN – Paris, France) 2014 – 2017

External advisor for the thesis: “Form and function relationships in the process of secondary adaptation to an aquatic life - the contribution of semi-aquatic mammals”

### PROFESSIONAL SOCIETY MEMBERSHIPS

Society for Integrative and Comparative Biology, 2012-present; International Society of Vertebrate Morphology, 2013-present; Royal Belgian Zoological Society 2021-present.

### PUBLIC OUTREACH/EDUCATION

*Print:* BBC Wildlife: “[After life](#)”, July 2019

*Nature blog behind the paper:* “[Metamorphosis as a driver of morphological diversity in Salamanders](#)” *CNRS blog:* “[La métamorphose, un véritable moteur de la diversité](#)”,

*Web:* *phys.org:* “[New Study reveals how metamorphosis has shaped the evolution of salamanders](#)”, *Natural History Museum Discover:* “[Metamorphosis is helping to explain salamander skull diversity](#)”, “[Examining the body of one of the world's most elusive porpoise species](#)”, *The conversation:* “*Natural selection in action: hurricanes Irma and Maria affected island lizards*”, *National Geographic:* “[This bizarre primate has a newly discovered digit](#)”, “*This secret skill helps lizards survive hurricanes*”...

*Video:* [12 days of Christmas about the aye-aye](#), public talk at the [50<sup>th</sup> anniversary of the Duke Lemur Center](#)

## Curriculum vitae Anne-Claire Fabre

Scientific advisory during learning vacation: scientific expert and supervision of 5 children during paleontological excavation in Montreal du Gers, France (one month each summer between 2003-2006).

Live events: Science is wonderful (November 2021); NHM researchers' night (London UK), La Fete de la Science (Paris, France)

### CURATORIAL EXPERIENCE

Curator of mammals at NMBE since 06/2022. Morphosource manager for vertebrates' collections at the NMBE.

Identification and preparation of specimens of mammals (extant and extinct specimens)

Digitization of collections using CT and surface scanners (NHM London, UK; MNHN, Paris, France)

All the specimens that I digitized are available on [Phenome10K](#), [Morphosource](#) and the [3Dtheque \(MNHN, Paris\)](#)

### INTERNATIONAL NETWORK AND RELATIONS

I have previously conducted my research in several countries (France, United Kingdom, United States, Switzerland and Germany) and I have organized and participated in field work and paleontological expeditions since 2003 (see list below). Through these diverse experiences I have built an international network of collaborators (see references below) and gained important knowledge in experimental, computational, and field systems.

- **Field work**

2019 – Paros, Greece (Harvard University, University of Athens and MNHN)

2018 – Pine Cay and Water Cay, Turks and Caicos, (Harvard University and MNHN)

2017-18 – French Guiana (MNHN)

2017 – Pine Cay and Water Cay, Turks and Caicos, (Harvard University and MNHN)

2017 – Paros and Naxos, Greece (Harvard University, University of Athens and MNHN)

2016 – Korcula, Croatia (University of Zagreb and MNHN)

2016 – Vis, Lastovo and 15 other islands, Croatia (UC Irvine, University of Zagreb, Paris 6 and MNHN)

2015 – French Guiana (MNHN)

2015 – Martinique (Harvard University and MNHN)

2015 – Venezuela (IVIC and MNHN)

2015 – Curaçao and Bonaire (Harvard University and MNHN)

2015 – San Andres, Providencia, Colombia (Harvard University and MNHN)

2013 – Singapore, Republic of Singapore (NUS and MNHN)

2013 – Lastovo, Croatia (University of Zagreb and MNHN)

2013 – Los Tuxtlas, Mexico (UNAM and MNHN)

- **Paleontological field work**

2019 – Chennai, India (NHM, University of Delhi)

2009-2011 – Batallones (Madrid, Spain, Miocene)

2007 – Esperaza (Aude, France, Maastrichtien)

2006 – Thezels (Quercy, France, Oligocene)

2005 – Caraman (Haute Garonne, France, Oligocene)

2003 to 2006 – Montreal-du-Gers (Gers, France, Miocene)

### INTERNATIONAL ACTIVITIES

I have presented my work at several international congresses, and I have been invited to present my work in Europe and abroad at international meetings and symposia, including a keynote lecture at the

## **Curriculum vitae Anne-Claire Fabre**

International Meeting of Early-stage Researchers in Palaeontology. I am also dedicated to academic service, both within my institution and across the broader scientific community. I have co-supervised 2 PhD students at the MNHN in Paris and have supervised 19 Master students at the NHM (London), the MNHN (Paris), the UZH (Zurich), the MfN (Berlin) and in many other countries as a co-supervisor. In addition to reviewing journal articles and books, I am also an elected member of the executive committee of the International Society of Vertebrate Morphology (elected, 2019) and the Linnean Society (elected, 2020).

### **LANGUAGES**

French (native), English (fluent), German (B1), Spanish (basic communication skills / working knowledge).