

## Postdoctoral experiences

- 2016-2017** **Postdoctoral fellow** of the Alexander von Humboldt foundation, John NYAKATURA's group, Humboldt-Universität zu Berlin, Germany
- 2015** **Postdoctoral contract**, Marcelo SÁNCHEZ-VILLAGRA's group, Universität Zürich, Paläontologisches Institut und Museum, Switzerland

## Education

- 2011 - 2014** **Doctorate in Palaeontology**, supervised by Christian DE MUIZON, co-supervised by Christine ARGOT, Centre de Recherches sur la Paléobiodiversité et les Paléoenvironnements (CR2P), Muséum national d'Histoire naturelle (MNHN), Université Pierre et Marie Curie (UPMC), CNRS, Sorbonne Universités; best distinction
- 2009 - 2011** **Master's degree of Science and Technology**, speciality Universe Sciences, Environment, Ecology, sub-speciality Systematics, Evolution, Palaeobiodiversity, UPMC (with distinction)
- 2006 - 2009** **Bachelor's degree of Science and Technology**, Earth Sciences, UPMC; top of the year, with distinction
- 2006** **Undergraduate degree ('baccalauréat') in Science**; with distinction

## Internships

- 2011** **A new durophagous phocid (Mammalia: Carnivora) from the late Neogene of Peru and considerations on monachine seals phylogeny.**  
(5 months) Supervisor: Christian DE MUIZON  
Location: MNHN, CR2P
- 2010** **On the affinities of *Tetraceratops insignis*, an Early Permian synapsid.**  
(4 months) Supervisor: Michel LAURIN  
Location: UPMC, CR2P
- 2009** **Study of the palaeontological collections of the UPMC**  
(3 months) Supervisor: Fabrizio CECCA  
Location: UPMC, CR2P

## Indexed publications and participation to international meetings

21 publications, among which 11 as first author:

21. De los Arcos, S., Partarrieu, D., Carrillo-Briceño, J. D., & **Amson, E.** (in press). The southernmost occurrence of the aquatic sloth *Thalassocnus* (Mammalia, Tardigrada) from two new Pliocene localities in Chile. *Ameghiniana*. doi: 10.5710/AMGH.29.12.2016.3004
20. Arnold, P., Amson, E., & Fischer, M.S. (accepted) Differential scaling patterns of vertebrae and the evolution of neck length in mammals. *Evolution*. doi: 10.1111/evo.13232. Published online 13/04/17
- 19 Dewaele, L., Amson, E., Louwye, S., & Lambert, O. (2017) Reappraisal of the extinct seal "*Phoca*" *vitulinoides* from the Neogene of the North Sea Basin, with bearing on its geological age, phylogenetic affinities, and locomotion. *PeerJ*, 5: e3316.
18. Coutier, F., Hautier, L., Cornette, R., Amson, E., & Billet, G. (2017). Orientation of the lateral semicircular canal in Xenarthra and its links with head posture and phylogeny. *Journal of Morphology*, 278: 704–717
17. Aguirre-Fernández, G., Carrillo-Briceño, J. D., Sánchez, R., **Amson, E.**, & Sánchez-Villagra, M. R. (2017) Fossil cetaceans (Mammalia, Cetacea) from the Neogene of Colombia and Venezuela. *Journal of Mammalian Evolution*, 24:71–90.
- 16. Amson, E.**, Muizon, C. de, & Gaudin, T. J. (2016) A reappraisal of the phylogeny of the Megatheria (Mammalia: Tardigrada), with an emphasis on the relationships of the Thalassocninae, the marine sloths. *Zoological journal of the Linnean Society*. Published online 09/06/16.
15. Carrillo-Briceño, J. D., **Amson, E.**, Zurita A., & Sánchez-Villagra, M. R. (2016) Hermann Karsten (1817-1908): A German naturalist in the Neotropics and the significance of his paleovertebrate collection. *Fossil Record*, 20: 21–36.
14. Forasiepi, A. M., Macphee, R. D. E., Hernández del Pino, S., Schmidt, G. I., **Amson, E.**, Grohé, C. (2016) Exceptional skull of *Huayqueriana* (Mammalia, Litopterna, Macraucheniiidae) from the Late Miocene of Argentina: anatomy, systematics, and paleobiological implications. *Bulletin of the AMNH*, 404:1–76.

13. Amson, E., Kolb, C. (2016) Scaling effect on the mid-diaphysis properties of long bones - the case of the Cervidae (deer). *The Science of Nature* (Naturwissenschaften), 103: 58.
12. **Amson, E.**, Carrillo, J. D., Jaramillo, C. (2016) Neogene sloth assemblages (Mammalia, Pilosa) of the Cocinetas Basin (La Guajira, Colombia): implications for the Great American Biotic Interchange. *Palaeontology*, 59: 563–582.
11. **Amson, E.**, Carrillo, J. D., Jaramillo, C. (2016) 3D models related to the publication: Neogene sloth assemblages (Mammalia, Pilosa) of the Cocinetas Basin (La Guajira, Colombia): implications for the Great American Biotic Interchange. *MorphoMuseum*, 2: e3
10. **Amson, E.**, Kolb, C., Scheyer T. M., Sánchez-Villagra, M. R. (2015) Growth and life history of Middle Miocene deer (Mammalia, Cervidae) based on bone histology. *Comptes rendus Palevol*, 14: 637–645.
9. **Amson, E.**, Muizon, C. de, Domning, D. P., Argot, C., & Buffrénil, V. de (2015) Bone histology as a clue for resolving the puzzle of a dugong rib in the Pisco Formation, Peru. *Journal of Vertebrate Paleontology*, 35 : e922981.
8. Kolb, C., Scheyer, T.M., Veitschegger, K., Forasiepi, A.M., **Amson, E.**, Van der Geer, A.A.E., Hayashi, S., van den Hoek Ostende, L.W., Sánchez-Villagra, M.R. (2015) Mammalian bone palaeohistology: a survey and new data with emphasis on island forms. *PeerJ*, 3:e1358.
7. Solé F., **Amson E.**, Borths M., Vidalenc D., Morlo M., & Bastl K. A. (2015) A new large hyainailourine from the Bartonian of Europe and its bearings on the evolution and ecology of massive hyaenodonts (Mammalia). *PLoS ONE* 10: e0135698.
6. **Amson, E.**, Argot, C., McDonald H. G., & Muizon, C. de (2015) Osteology and functional morphology of the axial postcranium of the marine sloth *Thalassocnus* (Mammalia, Tardigrada) with paleobiological implications. *Journal of Mammalian Evolution*, 22: 473–518.
5. **Amson, E.**, Argot, C., McDonald H. G., & Muizon, C. de (2015) Osteology and functional morphology of the hind limb of the marine sloth *Thalassocnus* (Mammalia, Tardigrada). *Journal of Mammalian Evolution*, 22: 355–419.
4. **Amson, E.**, Argot, C., McDonald H. G., & Muizon, C. de (2015) Osteology and functional morphology of the forelimb of the marine sloth *Thalassocnus* (Mammalia, Tardigrada). *Journal of Mammalian Evolution*, 22: 169–242.
3. **Amson, E.**, Muizon, C. de, Laurin, M., Argot, C., & Buffrénil, V. de (2014) Gradual adaptation of bone structure to aquatic lifestyle in extinct sloths from Peru. *Proceedings of the Royal Society B*, 281: 20140192.
2. **Amson, E.** & Muizon, C. de (2014) A new durophagous phocid (Mammalia: Carnivora) from the late Neogene of Peru and considerations on monachine seals phylogeny. *Journal of Systematic Palaeontology*, 12: 523–548.
1. **Amson, E.** & Laurin, M. (2011) On the affinities of *Tetraceratops insignis*, an Early Permian synapsid. *Acta Palaeontologica Polonica* 56: 301–312.

International meetings, 12 oral presentations and 5 posters (see detail in appendix below).

## Obtained postdoctoral fellowships and other grants

- SYNTHESYS Access grant (2017)
- *Alexandre von Humboldt*, postdoctoral fellowship, (2016-2017)
- *Smithsonian tropical research institute* (STRI), Short-Term Fellowship (2015)

## Academic distinction

- Depéret award, Association Paléontologique Française, 2014.

## Teaching

- Co-supervision of Jan Philipp Kundt's Master thesis, Berlin (1 year; Humboldt University, 2016-2017)
- Co-supervision of Falk Mielke's Master thesis, Berlin (6 months; Humboldt University, 2016-2017)
- Co-supervision of Maja Mielke's Master thesis and 'Projekt Module', Berlin (1 year; Humboldt University, 2016-2017)
- Course and workshop, « Struktur und Funktion der Landwirbeltiere » (lecturer and supervisor of practical), Berlin (12H, 2016-2017)
- Workshop on 'Evolutionary Morphology and Palaeobiology', International Biology undergraduate summer school, teaching assistant, Zürich (4H, 2015)
- Course on Evolutionary Morphology of Vertebrates (BIO121 and BIO262), lecturer and co-supervision of practical, Zürich (6H, 2015)
- Supervision of two student projects of the BIO262 module, Stephan Spiekman and Sergio Soares, Zürich (1 month, 2015)
- Co-supervision (50%) of an internship of Master's degree, Marine Haquin (3 months, MNHN, 2012)

## Magisterial conference

- Contribution of bone histology and microstructure to palaeobiology - mammalian examples. Museum für Naturkunde, Berlin, Germany (2016).
- Conferences on the Palaeobiology of *Thalassocnus*, Museo de Historia Natural, Santiago, and Universidad católica del Norte, Coquimbo, Chile (2015)

## Administrative activities and other collective responsibilities

- Thirteen article reviews for ten international journals (*Ameghiniana*; *Biological Journal of the Linnean Society*; *Integrative and Comparative Biology*; *Journal of Mammalian Evolution*; *Journal of Systematic Palaeontology*; *Palaeontologia electronica*; *Palaeontology*; *Rivista Italiana di Paleontologia e Stratigrafia*; *Swiss Journal of Palaeontology*; *The Science of Nature (Naturwissenschaften)*; *Transactions of the Royal Society of South Africa*)
- Referee for a book proposal (Springer, Animal Science, 2017)
- Referee for an application to a Sepkoski Grant (Paleontological Society, 2016)
- Member of the committee for the appointment of Christian Klug to professorship (2015, University of Zürich).
- Member of the French Palaeontological Association (since 2014)
- President of the association 'Bureau des doctorants et étudiants du Muséum' (2012-2013)
- Member of the organising committee of the Student congress of the MNHN (2012)

## Divuligation and outreach

- Collaborated on a video (youtube) accompanying an article in *Evolution: Education and Outreach* (Sánchez-Villagra & Wernerburg, 2016, *Evo Edu Outreach* 9:11)
- Interviewed by the newspaper *Frankfurter Allgemeine* (2016)
- Interviewed for the German televisual broadcast *Galileo* (ProSieben channel, 2015)
- Contributor of a *smartphone* application for the exhibition of Palaeontology of the MNHN (2015)
- Redaction of a press release (MNHN, UPMC, CNRS) for the publication of Amson *et al.* (2014), picked up by *National geographic*, *NBC news*, etc. (2014)
- Reviewing of an outreach article in the *Journal de Mickey* (Disney Hachette Presse, 2014)
- Supervisor for pedagogy workshops ('Fêtes de la Science' 2010 - 2014, MNHN)

## Seminars and fieldwork

June 2015	Palaeontological excavation, Pliocene, Coquimbo, Chile.
Jul.-Aug. 2011	Palaeontological excavation, Autunian, Burgundy, France (supervised by Jean-Sebastien STEYER, CR2P)
Feb. 2011	Seminar of the <i>Laboratoire Informatique et Systématique</i> (UPMC)

## Technical skills

- Computational sciences, informatics
  - Phylogenetic programs: PAUP, Mesquite, TNT, Maclade
  - Imaging programs (Avizo, ImageJ/Fiji, Mimics, VG studio)
  - Programming: Shell, R
  - Microsoft Office, Adobe Photoshop, Illustrator
- Languages
  - English Complete professional command, written and oral. Higher education language skills certification (CLES), level B2
  - Spanish Excellent command, written and oral.
  - German Beginner
- Collection management
  - Catalogue numbering, classifying, and entering of specimens in informatics database (Jacim).
  - Participation to the re-assembling of an exhibit specimen of the MNHN
- Others

- Publishing-grade photography (trained by Christian LEMZAOUA, former photograph at the CR2P)
- Macro-fossil preparation and casting (trained by Renaud VACANT and Philippe RICHIR, CR2P)
- Petrographic thin-sectioning.

## **Hobbies**

- Gastronomy, cinema, museums, travels, sports (running, cycling, table tennis and skiing).

## Appendix. List of attendances to international meetings:

12 oral presentations and 5 posters

		Oral presentation/Poster
April 2017	<b>Amson, E.</b> , Billet, G., Muizon, C. de. Cranial pachyosteosclerosis: the unique case of the marine sloth <i>Thalassocnus</i> . <i>Secondary Adaptations of Tetrapods to Life in the Water</i> (Berlin)	P
November 2016	De los Arcos S., Partarrieu D., Carrillo-Briceño J. D., <b>Amson E.</b> Dos nuevas localidades con restos del perezoso marino <i>Thalassocnus</i> (Mammalia, Tardigrada) en sedimentos pliocenos de las Formaciones Coquimbo y Horcón, Chile norte y central. V Simposio de Paleontología en Chile (Concepción, Chile).	O
October 2016	Carrillo-Briceño, J. D., <b>Amson, E.</b> , Zurita, A., Sánchez-Villagra, M. R. A taxonomic and geographic study of Hermann Karsten's 19th century paleovertebrate collection from the northern neotropics. <i>Annual Meeting of the Society of Vertebrate Paleontology</i> (Salt Lake City).	P
October 2016	Forasiepi, A. M., Macphee, R. D., Hernandez Del Pino, S., Schmidt, G., <b>Amson, E.</b> , Grohe, C. Paleobiology of <i>Huayqueriana</i> , a late miocene litoptern from Western Argentina: interpreting conflicting signals from morphological attributes. Poster; <i>Annual Meeting of the Society of Vertebrate Paleontology</i> (Salt Lake City).	P
June 2016	<b>Amson, E.</b> , Arnold, P., Nyakatura, J. Bone internal microstructure of the forelimb of xenarthrans (Mammalia) - functional implications. International Congress of Vertebrate Morphology (Washington DC).	O
June 2016	Coutier, F., Hautier, L., Cornette, R., <b>Amson, E.</b> , Billet, G. Head posture and orientation of the lateral semicircular canal in xenarthrans (Mammalia). International Congress of Vertebrate Morphology (Washington DC).	O
May 2016	Kolb C., Scheyer, T. M., <b>Amson, E.</b> Veitschegger, K. Forasiepi, A. M. Sánchez-Villagra, M. R. Bone and tooth microstructure in extinct and extant mammals and implications for growth and life history evolution, with an emphasis on cervids as a case study. XXX Jornadas Argentinas de Paleontología de Vertebrados (Buenos Aires).	O
May 2016	De los Arcos S., Partarrieu D., Carrillo-Briceño J. D., <b>Amson E.</b> Nuevos registros del perezoso marino <i>Thalassocnus</i> (Mammalia, Tardigrada) en sedimentos pliocenos de las Formaciones Coquimbo y Horcón, en Chile norte y central. XXX Jornadas Argentinas de Paleontología de Vertebrados (Buenos Aires).	O
March 2016	<b>Amson, E.</b> Integrative functional anatomy of the forelimb of xenarthrans (armadillos, sloths, and anteaters). Network meeting of the Alexander von Humboldt foundation (Düsseldorf)	-
October 2015	Dewaele, L., <b>Amson, E.</b> , Louwey, S. & Lambert, O. Reappraisal of the fossil seal <i>Phoca vitulinoides</i> from the Neogene of the North Sea Basin, with bearing on the geological age, phylogenetic affinities, and locomotion of a new diminutive Miocene phocine species. <i>Annual Meeting of the Society of Vertebrate Paleontology</i> (Dallas)	P
October 2015	Partarrieu, D., De los Arcos, Saleta, Mourgues, F. A., <b>Amson, E.</b> , Severino, S. El yacimiento paleontológico Lomas del Sauce, Plioceno de la Formación Coquimbo: experiencia y perspectivas. XIV Congreso Geológico Chileno (La Serena)	O
July 2015	<b>Amson E.</b> , Scheyer T. M., Kolb C., Sánchez-Villagra, M. R. New data on cervid histology - life history and allometry. European association of vertebrate palaeontologists (Opole)	O
July 2015	<b>Amson E.</b> , Scheyer T. M., Kolb C., Sánchez-Villagra, M. R. New data on cervid histology - life history and allometry. International symposium on paleohistology (Bonn)	O
May 2015	<b>Amson, E.</b> Paléobiologie de <i>Thalassocnus</i> (Mammalia, Tardigrada), le paresseux marin. Association Paléontologique Française (Bâle)	O
November 2014	<b>Amson, E.</b> , Argot, C., McDonald, H., De Buffrénil, V., Laurin, M., Domning, D., De Muizon, C. The Postcranium of <i>Thalassocnus</i> , the marine sloth. <i>Annual Meeting of the Society of Vertebrate Paleontology</i> (Berlin)	P
June 2014	<b>Amson, E.</b> , Muizon, C. de, Laurin, M. Domning, D. P., Argot, C., & Buffrénil, V. de. Bone microstructure and histology of <i>Thalassocnus</i> , the marine sloth. <i>Secondary Adaptations of Tetrapods to Life in the Water</i> (Washington, D.C.)	O
June 2014	Solé F., <b>Amson E.</b> , Borths M., Vidalenc D., & Bastl K.A. A new hyainailourine from Bartonian of Europe. European Association of Vertebrate Palaeontologists (Turin)	O
May 2014	<b>Amson, E.</b> , Muizon, C. de, Laurin, M. Domning, D. P., Argot, C., & Buffrénil, V. de. Microstructure et histologie osseuse de <i>Thalassocnus</i> , le paresseux marin. <i>Annual meeting of the Association Paléontologique Française</i> (Paris)	O
February	<b>Amson, E.</b> , Muizon, C. de, Domning, D. P., Argot, C., & Buffrénil, V. de. The puzzle of the	P

2014 dugongid rib solved by histology. *Young Natural History scientists' Meeting* (Paris)  
December **Amson, E.**, Muizon, C. de, Laurin, M., Argot, C., & Buffrénil, V. de. Histomorphometry on the  
2013 postcranium of *Thalassocnus*, the aquatic sloth. *Annual Meeting of the Palaeontological Association* (Zurich) 0