

Dimitri NEAUX

Age: 31 (16/08/1987)

Nationality: French

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Archéozoologie, Archéobotanique :

Sociétés, pratiques et environnements

Muséum national d'Histoire naturelle

UMR CNRS 7209, Paris, France

Research interests

- Characterization and quantification of craniomandibular variations and covariations
- Morphological integration and modularity
- Evolution of the skull in mammals

Current position

2018 - Postdoctoral Fellow - Muséum National d'Histoire Naturelle, Paris, France

UMR CNRS 7209 - Archéozoologie, Archéobotanique

Supervisor: Dr Thomas Cucchi

Previous positions

2016-2017 - Postdoctoral Fellow - University of New England, Armidale, Australia

Department of Zoology, Function, Evolution and Anatomy Research Lab

Supervisor: Prof Stephen Wroe

2013-2016 - Teaching and Research Assistant - Université de Poitiers, France

UMR CNRS 7262 - Palevoprim

Education

2010-2013 - Doctorate in Physical Anthropology with highest honours (Palevoprim)

Covariations of craniofacial structures in hominids

Supervisors: Dr Franck Guy, Dr Stephane Ducrocq

2010 - Master in Paleobiology Evolution with honours, Université de Montpellier

with honors, Rank: 4/16

2008 - Bachelor in Paleontology, Université de Poitiers

with honors, Rank: 2/10

Tools and methods

- Microtomography (scanner, reconstruction)
- Digital imaging (software: Avizo, Mimics, Geomagic, ImageJ)
- 3D geometric morphometrics (software: R, MorphoJ, tps)
- Multivariate statistics and data analysis (software: R, Visual Basic)

Scientific publications

Neaux D, Sansalone G, Ledogar JA, Heins Ledogar S, Luk THY, Wroe S (2018). Basicranium and face: Assessing the impact of morphological integration on primate evolution. *Journal of Human Evolution*. 118: 43-55

Ledogar JA, Luk TH, Perry JMG, Neaux D, Wroe S (2018) Biting mechanics in a specialized clade of primate seed predators. *Plos One*. 13(1): e0190689

Neaux D, Bienvenu T, Guy F, Sansalone G, Ledogar J, Rae TC, Wroe S, Brunet M (2017). Relationship between foramen magnum position and locomotion in extant and extinct hominids. *Journal of Human Evolution*. 113:1-9

Neaux D (2017) Morphological integration of the cranium in *Homo*, *Pan* and *Hylobates* and the evolution of hominoid facial structures. *American Journal of Physical Anthropology*. 162(4): 568-579

- Neaux D, Gilissen E, Coudyzer W, Guy F (2015) Integration between the face and the mandible of *Pongo* and the evolution of the craniofacial morphology of orangutans. *American Journal of Physical Anthropology*. 158 (3): 475–486
- Neaux D, Gilissen E, Coudyzer W, Guy F (2015) Implications of the relationship between basicranial flexion and facial orientation for the evolution of hominid craniofacial structures. *International Journal of Primatology*. 36 (6): 1120-1131
- Neaux D, Guy F, Gilissen E, Coudyzer W, Vignaud P, Ducrocq S (2013) Facial orientation and facial shape in extant great apes: a geometric morphometric analysis of covariation. *Plos One*. 8(2): e57026
- Neaux D, Guy F, Gilissen E, Coudyzer W, Ducrocq S (2013) Covariation between midline cranial base, lateral basicranium and face in modern humans and chimpanzees: a 3D geometric morphometric analysis. *The Anatomical Record*. 296 (4): 568–579

Book chapter

- Neaux D, Guy F, Gilissen E, Coudyzer W, Vignaud P and Ducrocq S (2013) Craniofacial covariation in extant great apes: a geometric morphometric study. In: Lestrel PE, editor. *Biological Shape Analysis*. New Jersey: World Scientific. p 193-206. ISBN: 9814518409

Main oral communications

- 2018 – Basicranium and face: Assessing the impact of morphological integration on primate evolution. Journées de la Société d'Anthropologie de Paris (Poitiers, France)
- 2016 – Morphological integration and evolution of craniofacial structures in hominoids. 9ème Symposium de Morphométrie et Evolution des Formes (Paris, France)
- 2016 – Interest of the study of morphological integration in the craniofacial structures of hominids. PACEA, Université de Bordeaux (Bordeaux, France)
- 2015 – Morphological integration of the face in humans and chimpanzees and the evolution of early hominin craniofacial structures. Museo Nacional de Ciencias Naturales (Madrid, Spain)
- 2013 – Covariation entre morphologie et orientation de la face chez les grands singes actuels. 7ème Symposium de Morphométrie et Evolution des Formes (Lyon, France)
- 2011 – A geometric morphometric analysis of covariation between facial orientation and facial shape in extant great apes. International Symposium on Biological Shape Analysis (Okinawa, Japan)

Teaching experience

2013-2015: 192 hours per year, as a teaching and research assistant

2011-2013: 64 hours per year, during my thesis

-Paleontology (paleoanthropology, evolution of vertebrates and invertebrates, fieldwork)

-Statistics (descriptive statistics, multivariate analysis, analysis of regression/correlation)

-Geology (sedimentology, petrology, tectonics, cartography)

Teaching activities. U: undergraduate, G: graduate, L: lecture, T: tutorial, PW: practical work.

	Course	Level	Hours	Type of course
2014-15	Paleontology	U/G	56	PW
	Geology	G	92	T/PW
	Statistics	G	44	L/PW
2013-14	Paleontology	U/G	66	L/T/PW
	Geology	G	86	T/PW
	Statistics	G	40	PW
2012-13	Paleontology	G	2	L
	Geology	G	62	PW
2011-12	Paleontology	G	30	PW
	Geology	G	34	PW

Supervision of Master of Research

2015 – Two students: “Evolution of the cranial base flexion in hominids”, “Characterization and quantification of airorhynchy in pongids”

2014 – One student: “Link between blood flow and brain size in hominids”

Grants

2015 – SYNTHESYS grant - European Union funding - Museo Nacional de Ciencias Naturales, Madrid

Professional services

-Peer review: American Journal of Physical Anthropology, The Anatomical Record (2), Plos One (2), Journal of Anatomy, Journal of Comparative Human Biology (2), Biodiversitas, European Journal of Human Genetics, Bulletins et Mémoires de la Société d'Anthropologie de Paris, Journal of Applied Oral Science

-Grant review: Leakey Foundation (2)

Scientific mediation

2010-2015-Interventions in the « Fête de la Science », French program for the promotion of sciences

2010-2015-Interventions in the « Action + » program of the Université de Poitiers: presentation of my research to high school students

Languages

-Fluent in English (TOEFL iBT: 107/120)

-Good level in Spanish