

Dr. Sergio Almécija

American Museum of Natural History
Division of Anthropology
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Professional appointments

Senior Research Scientist. Division of Anthropology, American Museum of Natural History (New York, US). 2018-present.
Core Faculty. New York Consortium in Evolutionary Primatology (New York, US). 2018-present.
Adjunct Associate Professor, CUNY PhD Program in Anthropology (New York, US). 2018-present.
Research Associate. Institut Català de Paleontologia Miquel Crusafont (Barcelona, Spain). 2010-present.
Assistant Research Professor. Center for the Advanced Study of Human Paleobiology, Department of Anthropology, The George Washington University (Washington DC, US). 2018-present.
Assistant Professor. Center for the Advanced Study of Human Paleobiology, Department of Anthropology, The George Washington University (Washington DC, US). 2015-2018.
Research Instructor. Department of Anatomical Sciences, Stony Brook University (New York, US). 2013-2015.
Postdoctoral Fellow. Department of Vertebrate Paleontology, American Museum of Natural History and New York Consortium in Evolutionary Primatology (New York, US). 2010-2012.

Education

Doctorate in Biological Anthropology, Cum Laude. Universitat Autònoma de Barcelona, Universitat de Barcelona, and Institut Català de Paleontologia (Barcelona, Spain). 2009.
Degree in Biological Sciences. Universitat Autònoma de Barcelona (Barcelona, Spain). 2005.

Major collaborative research grants

Pending submission:

Establishing biomechanical links between ape locomotion, evolution, and anatomy through novel field-based 3D data collection and skeletal modeling (NSF-CAREER BCS 2043048). PI: Nathan E Thompson. **Senior personnel:** Sergio Almécija, Lillian B Niwagaba. \$ 747,760 (60 months).

Funded:

The Aragonian/Vallesian transition in the Vallès-Penedès Basin. Departament de Cultura of the Generalitat de Catalunya (CLT0009_22_000018). **Research Associate.** 82,716.97 € (approximately \$90,000). 2022-2025.
The Cenozoic primates from the Iberian Peninsula and their contribution to the reconstruction of the evolutionary history of the group. Spanish 'Ministerio de Economía y Competitividad' (PID2020-116908GB-I00). PIs: Salvador Moyà Solà, Judit Marigó. **Research Associate.** 181,500 € (approximately \$210,000). 2021-2024.
The Miocene fossil primates from the Vallès-Penedès Basin. Departament de Cultura of the Generalitat de Catalunya #CLT009/18/00071. **coPIs:** Sergio Almécija, Salvador Moyà-Solà. 44.022,00€ (approximately \$50,000). 2018-2021.
Comparison of arboreal locomotion in ecologically distinct primate populations (NSF-DDRI BCS 1753963). **PI:** Sergio Almécija; **co-PI:** Kelly Östrosky. \$13,167. 2018-3-1 2021-12-31.
The Cenozoic primates from the Iberian Peninsula: Evolution, paleoenvironment and paleogeography. Spanish 'Ministerio de Economía y Competitividad' (CGL2017-82654-P). **coPIs:** Salvador Moyà-Solà, Raef Minwer-Barakat. 250,000€ (approximately \$310,000). 2018-2020. **Research Associate.**
The biomechanics of specific locomotion used by our closest living primate relatives. National Science Foundation (NSF-SPRF 1719432, formerly 1606853). **PI:** Nathan E. Thompson; **co-PIs:** Sergio Almécija, Shannon C. McFarlin. \$219,346. 2016-8-15 2019-7-31
Phylogenetic inference in apes and humans using hard-tissue 3D shape. The George Washington

University Facility Fund (CCFF). **PI: Sergio Almécija**. \$8,000. 2017-7-1 2018-6-30

Phylogenetic inference in hominoids using multiple hard-tissue 3D morphologies. Wenner-Gren Foundation. **PI: Sergio Almécija**; co-PI: Santiago A. Catalano. \$18,866. 2016-11-1 2019-1-31

Phylogenetic inference in apes and humans using hard-tissue 3D shape. The George Washington University Facility Fund (CCFF). **PI: Sergio Almécija**. \$5,000. 2016-7-1 2017-6-30

The hominid pelvis: Testing alternative evolutionary hypotheses for the Pan-hominin LCA pelvis shape. Wenner-Gren Foundation. PI: Ashley Hammond; **co-PIs: Sergio Almécija**, Jeroen Smaers. \$16,350. 2015-2016.

Reconstructing phenotypic change in the pelvis of apes and humans. L.S.B. Leakey Foundation. PI: Ashley Hammond; **co-PI: Sergio Almécija**. \$8,952. 2015-2016.

Miocene apes from Castell de Barberà (Catalonia, Spain). L.S.B. Leakey Foundation. **PI: Sergio Almécija**. \$17,500. 2014-2015.

The Cenozoic fossil primates of the Iberian Peninsula. Spanish 'Ministerio de Economía y Competitividad' (CGL2014-54373-P). coPIs: Salvador Moyà-Solà, Raef Minwer-Barakat. 192,000€ (approximately \$208,837.525). 2015-2017. **Research associate**.

Fieldwork project: The Miocene fossil primates from the Vallès-Penedès Basin. Departament de Cultura of the Generalitat de Catalunya #2014/100609. PI: David M. Alba; **coPIs: Sergio Almécija**, Salvador Moyà-Solà. 69,721.83€ (approximately \$85,400). 2014-2017.

Consolidated Research Group PIPH (Grup de Recerca Consolidat 'Grup de Paleoprimatologia i paleontologia humana'). 2014 SGR 416, GRC. AGAUR, Departament d'Innovació, Universitats i Empresa, Generalitat de Catalunya. PI: Salvador Moyà-Solà. 43,000€ (approximately \$52,685). 2014-2016. **Research Associate**.

Comparative morphological analysis of the hand and wrist in *Ardipithecus ramidus* and Miocene hominoids. National Science Foundation (NSF-BCS 1316947). PI: Caley Orr; **coPIs: Sergio Almécija**, William L. Jungers, Matthew Tocheri, Biren A. Patel. Multi-institution award total: \$128,549.00. 2013-2016 (2013-09-01 – 2016-08-31).

Development of large-scale dense scene capture and tracking instrument. National Science Foundation (NSF-MRI CNS-1337722). PI: James Hahn; **coPIs: Sergio Almécija**, Taeyoung Lee, John Philbeck, Gabe Sibley.: \$500,000. 2013-2016 (2013-9-1 – 2016-8-31).

Paleontological excavations at the Late Miocene hominoid-bearing site of Can Llobateres 1 (Vallès-Penedès Basin, Catalonia, Spain): season 2013. National Geographic Society 9316-13. PI: David M. Alba; **coPIs: Sergio Almécija**, Salvador Moyà-Solà, Daniel DeMiguel, Isaac Casanovas-Vilar, Josep M. Robles. \$11,825. 2013.

Evolutionary history of Paleogene and Neogen Iberian primates. 2011 CGL2011-27343. PI: Salvador Moyà-Solà. 205,700 € (approximately \$270,000). 2012-2014. **Research Associate**.

Inforegió Project (2009REGIÓ 00011), 'Virtual Paleontology: fossil digitization and interaction'. Creation of a virtual wall for the ICP's Museum Miquel Crusafont, to 3D interact with virtual fossils. **PI: Sergio Almécija**. 100,000 € (approximately \$139,000). 2009-2010.

Consolidated Research Group PIPH (Grup de Recerca Consolidat 'Grup de Paleoprimatologia i paleontologia humana'). 2009 SGR 754, GRC. AGAUR, Departament d'Innovació, Universitats i Empresa, Generalitat de Catalunya. PI: Salvador Moyà-Solà. 45,760 € (approximately \$61,000). 2009-2013. **Research Associate**.

Fossil great apes (Hominoidea) from the Mediterranean Miocene: origin, paleobiology and evolution. CGL2008-00325/BTE. Ministerio de Educación y Ciencia, Spain. PI: Salvador Moyà-Solà. 100,000 € (approximately \$134,000). 2009-2011. **Research Associate**.

Searching for the Origins of Modern Hominoids Initiative (SOMHI). Comissionat per Universitats i Recerca (Generalitat de Catalunya). PI: Salvador Moyà-Solà. 200,000 € (approximately \$285,000). 2005-2008. **Research Associate**.

Revealing Hominid Origins Initiative. Project RHOI-Hominid-NSF-BCS-0321893. National Science Foundation (NSF), USA. PI: Tim D. White. \$76,000. 2004-2009. **Research Associate**.

Personal fellowships and awards

American Association of Physical Anthropologists (AAPA) Professional Development Grant. \$5,000. 2013.

Beatriu de Pinós Postdoctoral fellowship (2009 BP-A 00226; 2 years) at the American Museum of Natural History (New York, NY). Total award: 64,258 € (approximately \$87,000). 2011-2012.

Fulbright Occasional Lecturer travel grant to visit The University of West Alabama (Alabama, US). \$500. 2010.

Fulbright Postdoctoral grant (2008 BFUL 00049; 1 year) to work at the American Museum of Natural History (New York, NY). Total award: \$39,800. 2010.

Irene Levi-Sala CARE Archaeological Foundation Grant for a scientific stay at Tel Aviv University (Israel). \$1,500. 2009.

Generalitat de Catalunya (Spain) Postgraduate Grant (2008 BE1 00370) for a scientific stay at the American Museum of Natural History (New York, USA). 3,000 € (approximately \$3,800). 2008.

European Commission's Research Infrastructure SYNTHESIS Grant for a scientific stay at the National Natuurhistorisch Museum, Naturalis (Leiden, Netherlands). 2,826 € (approximately \$4,000). 2007.

Generalitat de Catalunya (Spain) Formació d'Investigadors Graduate Grant (2006FI 00065) for PhD studies (4 years). 56,000 € (approximately \$66,200). 2006.

Diputació de Barcelona (Barcelona, Spain) Undergraduate Grant to collaborate with Institut de Paleontologia Miquel Crusafont (Sabadell, Spain). 2000 € (approximately \$2,500). 2003-2004.

Articles, books, chapters (Science Citation Index. *indicates student co-author)

In preparation:

Almécija S, Pugh KD, Anaya A*, Smith CM, Hammond AS, Boyer DM, Catalano SA. Primate Phenotypes: A Multi-Institution Collection of 3D Morphological Data Housed in MorphoSource. *Scientific Data*.

Smith CM, David R, **Almécija S**, Laitman JT, Hammond AS. First Evolutionary Insights into the Human Otolithic System. *Nature Communications*.

Raventós-Izard G*, **Almécija S**, Moyà-Solà S, Alba DM, Arias-Martorell J. Ulnar morphology of *Pliobates cataloniae* (Pliopithecoidae: Crouzeliidae): Insights into catarrhine locomotor diversity and forelimb evolution. *Journal of Human Evolution*.

Catalano SA, Pugh KD, Hammond AS, Vinuesa V, Goloboff PA, **Almécija S**. High-coverage evolutionary analysis of great ape and human skeletal phenomes. *Nature*.

Under review:

Catalano SA, Escapa I, Pol D, Hammond AS, Pugh KD, Goloboff P, **Almécija S**. "PlaceMyFossils:" An integrative approach to analyze the phylogenetic placement of fossils using scaffolds. *Methods in Ecology and Evolution*.

Published:

Bouchet F*, Zanolli C, Urciuoli A, **Almécija S**, Fortuny J, Robles JM, Beaudet A, Moyà-Solà S, Alba DM. The Miocene primate *Pliobates* is a pliopithecoid: Implications for ape evolution. *Nature Communications*. In press.

Alba DM, Urciuoli A, Hammond AS, **Almécija S**, Rook L, Zanolli C (2024). Miocene ape evolution: Where does *Oreopithecus* fit in? *Bolletino della Società Paleontologica Italiana* 63 [doi:10.4435/BSPI.2024.01](https://doi.org/10.4435/BSPI.2024.01)

McKenzie S*, Arranz SG, **Almécija S**, De Miguel D, Alba DM (2024). Tetraconodontines and suines (Artiodactyla: Suidae) from the earliest Vallesian site of Castell de Barberà (Vallès-Penedès Basin, NE Iberian Peninsula). *Journal of Mammalian Evolution* 31:7. <https://doi.org/10.1007/s10914-023-09695-z>

Pugh KD, Catalano SA, Pérez de los Ríos M, Fortuny J, Shearer BM, Vecino Gazabón A*, Hammond AS, Moyà-Solà S, Alba DM, **Almécija S** (2023). The reconstructed cranium of *Pierolapithecus* and the evolution of the great ape face. *Proceedings of the National Academy of Sciences USA* 120 (44) e2218778120. <https://doi.org/10.1073/pnas.2218778120>

Arias-Martorell J, Urciuoli A, **Almécija S**, Alba DM, Nakatsukasa M (2023). The radial head of the Middle Miocene ape *Nacholapithecus kerioi*: Morphometric affinities, locomotor inferences, and implications for the evolution of the hominoid humeroradial joint. *Journal of Human Evolution* 178: 103345. <https://doi.org/10.1016/j.jhevol.2023.103345>

- Almécija S**, editor (2023). "HUMANS: Perspectives on Our Evolution from World Experts" *Columbia University Press*. 520 p. <http://cup.columbia.edu/book/humans/9780231201216>
- McKenzie S*, Sorbelli L*, Cherin M, **Almécija S**, Pina M, Abella J, Luján ÀH, DeMiguel D, Alba DM (2023). Earliest Vallesian suid remains from Creu de Conill 20 (Vallès-Penedès Basin, NE Iberian Peninsula). *Journal of Mammalian Evolution* 30: 155-212. <https://doi.org/10.1007/s10914-022-09643-3>
- Alba DM, **Almécija S** (2022). The adaptations that made us human: Morphology. In: Bertranpetit J, Peretó J, editors. *Illuminating Human Evolution: 150 Years after Darwin*. Singapore: Springer Nature Singapore. p 121-136. https://doi.org/10.1007/978-981-19-3246-5_10
- Wennemann SE*, Lewton KL, Orr CM, **Almécija S**, Tocheri MW, Jungers WL, Patel BA (2022). A geometric morphometric approach to investigate primate proximal phalanx diaphysis shape. *American Journal of Biological Anthropology* 177: 581-602. <https://doi.org/10.1002/ajpa.24460>
- Urciuoli A*, Zanolli C, **Almécija S**, Beaudet A, Dumoncel J, Morimoto N, Nakatsukasa M, Moyà-Solà S, Begun DR, Alba DM (2021). Reassessment of the phylogenetic relationships of the late Miocene apes *Hispanopithecus* and *Rudapithecus* based on vestibular morphology. *Proceedings of the National Academy of Sciences USA* 118: e2015215118. <https://doi.org/10.1073/pnas.2015215118>
- Urciuoli A*, Zanolli C, Beaudet A, Pina M, **Almécija S**, Moyà-Solà S, Alba DM (2021). A comparative analysis of the vestibular apparatus in *Epipliopithecus vindobonensis*: Phylogenetic implications. *Journal of Human Evolution* 151: 102930. <https://doi.org/10.1016/j.jhevol.2020.102930>
- Anaya A*, Patel BA, Orr CM, Ward CV, **Almécija S** (2021). Evolutionary trends of the lateral foot in catarrhine primates: Contextualizing the fourth metatarsal of *Australopithecus afarensis*. *Journal of Human Evolution* 161: 103078. <https://doi.org/10.1016/j.jhevol.2021.103078>
- Arias-Martorell J, **Almécija S**, Urciuoli A, Moyà-Solà S, Alba DM (2021). A proximal radius of *Barberapithecus huerzeleri* from Castell de Barberà: Implications for locomotor diversity among pliopithecoids. *Journal of Human Evolution* 157: 103032. <https://doi.org/10.1016/j.jhevol.2021.103032>
- Almécija S**, Hammond AS, Thompson NE, Pugh KD, Moyà-Solà S, Alba DM (2021). Fossil apes and human evolution. *Science* 372, 587. <https://doi.org/10.1126/science.abb4363>
- Püschel TA, Marcé-Nogué J, Gladman J, Patel BA, **Almécija S**, Sellers WI (2020). Getting its feet on the ground: Elucidating *Paralouatta*'s semi-terrestriality using the virtual morpho-functional toolbox. *Frontiers in Earth Science* 8: 79. <https://doi.org/10.3389/feart.2020.00079>
- Hammond AS, Rook L, Anaya AD, Cioppi E, Costeur L, Moyà-Solà S, **Almécija S** (2020). Insights into the lower torso in late Miocene hominoid *Oreopithecus bambolii*. *Proceedings of the National Academy of Sciences* 117: 278-284. <https://doi.org/10.1073/pnas.1911896116>
- Almécija S**, Tallman M, Sallam HM, Fleagle JG, Hammond AS, Seiffert ER (2019). Early anthropoid femora reveal divergent adaptive trajectories in catarrhine hind-limb evolution. *Nature Communications* 10: 4778. <https://doi.org/10.1038/s41467-019-12742-0>
- Fatica LM*, **Almécija S**, McFarlin SC, Hammond AS (2019). Pelvic shape variation between gorilla subspecies: Phylogenetic and ecological signals. *Journal of Human Evolution* 137: 102684. <https://doi.org/10.1016/j.jhevol.2019.102684>
- Pina M, Alba DM, Moyà-Solà S, **Almécija S** (2019). Positional behavior of the fossil great ape *Dryopithecus*: insights from the femoral neck cortical bone distribution. *Journal of Human Evolution* 136: 102651 <https://doi.org/10.1016/j.jhevol.2019.102651>
- Alba DM, Garcés M, Casanovas-Vilar I, Robles JM, Pina M, Moyà-Solà S, **Almécija S** (2019). Bio- and magnetostratigraphic correlation of the Miocene primate-bearing site of Castell de Barberà to the earliest Vallesian. *Journal of Human Evolution* 132: 32-46. <https://doi.org/10.1016/j.jhevol.2019.04.006>
- Villa A*, Delfino M, Luján ÀH, **Almécija S**, and Alba DM (2019). First record of *Latonia gigantea* (Anura, Alytidae) from the Iberian Peninsula. *Historical Biology* 31: 371-382. <https://doi.org/10.1080/08912963.2017.1371712>
- Villa A*, Abella J, Alba DM, **Almécija S**, Bolet A, Koufos GD, Knoll F, Luján ÀH, Morales J, Robles JM, Sánchez IM, Delfino M (2018). Revision of *Varanus marathonensis* (Squamata, Varanidae) based on historical and new material: morphology, systematics, and paleobiogeography of the European monitor lizards. *PLoS ONE* 13: e0207719. <https://doi.org/10.1371/journal.pone.0207719>

- Fernández PJ, Mongle CS*, Leakey L, Proctor DJ, Orr CM, Patel BA, **Almécija S**, Tocheri MW, Jungers WL (2018). Evolution and function of the hominin forefoot. *Proceedings of the National Academy of Sciences* 115: 8746-8751. <https://doi.org/10.1073/pnas.1800818115>
- Hammond AS, **Sergio Almécija**, Libsekal Y, Rook L, Roberto Macchiarelli R (2018). A partial *Homo* pelvis from the Early Pleistocene of Eritrea. *Journal of Human Evolution* 123: 109-128. <https://doi.org/10.1016/j.jhevol.2018.06.010>
- Alba DM, Casanovas-Vilar I, Furió M, García-Paredes I, Angelone C, Jovells-Vaqué S*, Luján À, **Almécija S**, Moyà-Solà S (2018). Can Pallars i Llobateres: A new hominoid-bearing locality from the late Miocene of the Vallès-Penedès Basin (NE Iberian Peninsula). *Journal of Human Evolution* 121: 193-203. <https://doi.org/10.1016/j.jhevol.2018.04.008>
- Urciuoli A*, Zanolli C, Fortuny J, **Almécija S**, Schillinger B, Moyà-Solà S, Alba DM (2018). Neutron-based computed microtomography: *Pliobates cataloniae* and *Barberapithecus huerzeleri* as a test-case study. *American Journal of Physical Anthropology* 166: 987-993. <https://doi.org/10.1002/ajpa.23467>
- Thompson NE, Ostrofsky KR*, McFarlin SC, Robbins MM, Stoinski TS, **Almécija S** (2018). Unexpected terrestrial hand posture diversity in wild mountain gorillas. *American Journal of Physical Anthropology* 166: 84-94. <https://doi.org/10.1002/ajpa.23404>
- Thompson NE, **Almécija S** (2017). The evolution of vertebral formulae in Hominoidea. *Journal of Human Evolution* 110: 18-36. <https://doi.org/10.1016/j.jhevol.2017.05.012>
- Hammond AS, **Almécija S** (2017). Lower ilium evolution in apes and hominins. *The Anatomical Record* 300: 828-844. (invited issue on pelvic morphology, function, and evolution) <https://doi.org/10.1002/ar.23545>
- Almécija S**, Sherwood CC (2017). Hands, brains, and precision grips: Origins of tool behaviors. In (Kaas et al. eds.) *Evolution of Nervous Systems*, Second Edition. Elsevier. pp 299-315. <https://doi.org/10.1016/B978-0-12-804042-3.00085-3>
- Almécija S** (2016). The planet of the apes strikes back [book review]. *Evolutionary Anthropology* 25: 218-220. <https://doi.org/10.1002/evan.21497>
- Nakatsukasa M, **Almécija S**, Begun DR (2016). The Hand of Miocene Hominoids. In (Kivell T, Lemelin P, Richmond BG, Schmitt D, eds.) *The Evolution of the Primate Hand: Perspectives from Anatomical, Developmental, Functional, and Paleontological Evidence*. Springer. pp 485-514. https://doi.org/10.1007/978-1-4939-3646-5_17
- Almécija S**. Pitfalls reconstructing the last common ancestor of chimpanzees and humans (2016). *Proceedings of the National Academy of Sciences, U.S.A.* 13: E943-E944. <https://doi.org/10.1073/pnas.1524165113>
- Ogihara N, **Almécija S**, Nakatsukasa M, Nakano Y, Kikuchi Y, Kunitatsu Y, Makishima H, Shimizu D, Takano T, Tsujikawa H, Kagaya M, Ishida H (2016). Carpal bones of *Nacholapithecus kerioi*, a middle Miocene hominoid from northern Kenya. *American Journal of Physical Anthropology*: 160, 469-482. <https://doi.org/10.1002/ajpa.22984>
- Alba DM, **Almécija S**, DeMiguel D, Fortuny J, Pérez de los Ríos M, Pina M*, Robles JM, Moyà-Solà S (2015). Miocene small-bodied ape from Eurasia sheds light on hominoid evolution. *Science*: 350: aab2625-2621-aab2625-2611. <https://doi.org/10.1126/science.aab2625>
- Fernández PJ*, **Almécija S**, Patel BA, Orr CM, Tocheri MW, Jungers WL (2015). Functional aspects of metatarsal head shape in humans, apes, and Old World monkeys. *Journal of Human Evolution* 86: 136-146. <https://doi.org/10.1016/j.jhevol.2015.06.005>
- Casanovas-Vilar I, **Almécija S**, Alba DM (2015). Late Miocene flying squirrels from Can Llobateres 1 (Vallès-Penedès Basin, Catalonia): systematics and palaeobiogeography. *Palaeobiodiversity and Palaeoenvironments*: 95: 353-372. <https://doi.org/10.1007/s12549-015-0192-1>
- Domínguez-Rodrigo M, Pickering TR, **Almécija S**, Heaton JL, Baquedano E, Mabulla A, Uribelarrea D (2015). Earliest modern human-like hand bone from a new >1.84 million-year-old site at Olduvai in Tanzania. *Nature Communications* 6: 7987. <https://doi.org/10.1038/ncomms8987>
- Almécija S**, Smaers JB, Jungers WL (2015). The evolution of human and ape hand proportions. *Nature Communications* 6: 7717. <https://doi.org/10.1038/ncomms8717>
- Almécija S**, Wallace IJ, Judex S, Alba DM, Moyà-Solà S (2015). Comment on 'Human-like hand use in *Australopithecus africanus*'. *Science* 348: 1101. <https://doi.org/10.1126/science.aaa8414>
- Almécija S**, Orr CM, Tocheri MW, Patel BA, Jungers WL (2015). Exploring phylogenetic and functional signals in complex morphologies: the hamate of extant anthropoids as a test-case

- study. *The Anatomical Record* 298: 212-229. (invited issue on geometric morphometrics and function) <https://doi.org/10.1002/ar.23079>
- Almécija S**, Alba DM (2014). On manual proportions and pad-to-pad precision grasping in *Australopithecus afarensis*. *Journal of Human Evolution* 73: 88-92. <https://doi.org/10.1016/j.jhevol.2014.02.006>
- Susanna I*, Alba DM, **Almécija S**, Moyà-Solà S (2014). The vertebral remains of the late Miocene great ape *Hispanopithecus laietanus* from Can Llobateres 2 (Vallès-Penedès Basin, NE Iberian Peninsula). *Journal of Human Evolution* 73: 15-34. <https://doi.org/10.1016/j.jhevol.2014.05.009>
- Bolet A, Delfino M, Fortuny J, **Almécija S**, Robles JM, and Alba DM (2014). An amphisbaenian skull from the European Miocene and the evolution of Mediterranean worm lizards. *PLoS ONE* 9: e98082. <https://doi.org/10.1371/journal.pone.0098082>
- Pina M*, **Almécija S**, Alba DM, O'Neill MC, Moyà-Solà S (2014). The Middle Miocene ape *Pierolapithecus catalaunicus* exhibits extant great ape-like morphometric affinities on its patella: Inferences on knee function and evolution. *PLoS ONE* 9: e91944. <https://doi.org/10.1371/journal.pone.0091944>
- Almécija S**, Shrewsbury M, Rook L, Moyà-Solà S (2014) The Morphology of *Oreopithecus bambolii* pollical distal phalanx. *American Journal of Physical Anthropology* 153: 582-597.
- Almécija S**, Tallman M, Alba DM, Pina M*, Moyà-Solà S, Jungers WL (2013). The femur of *Orrorin tugenensis* exhibits morphometric affinities with both Miocene apes and later hominins. *Nature Communications* 4:2888. <https://doi.org/10.1038/ncomms3888>
- Alba DM, Fortuny J, Pérez de los Ríos M*, Zanolli C, **Almécija S**, Casanovas-Vilar I, Robles JM, Moyà-Solà S (2013). New dental remains of *Anoiapithecus* and the first appearance datum of hominoids in the Iberian Peninsula. *Journal of Human Evolution* 65: 573-584. <https://doi.org/10.1016/j.jhevol.2013.07.003>
- Robles JM, Madurell-Malapeira J, Abella J, Rotgers C, Carmona R, **Almécija S**, Balaguer J, Alba DM (2013). New *Pseudaelurus* and *Styriofelis* remains (Carnivora: Felidae) from the middle Miocene of Abocador de Can Mata (Vallès-Penedès Basin). *Comptes Rendus Palevol* 12: 101-113. <https://doi.org/10.1016/j.crpv.2013.02.001>
- Robles JM, Alba DM, Fortuny J, De Esteban-Trivigno S, Rotgers C, Balaguer J, Carmona R, Galindo J, **Almécija S**, Berté JV (2013). New craniodental remains of the barbourfelid *Albanosmilus jourdani* (Filhol, 1883) from the Miocene of the Vallès-Penedès Basin (NE Iberian Peninsula) and the phylogeny of the barbourfelini. *Journal of Systematic Palaeontology* 11: 992-1022. <https://doi.org/10.1080/14772019.2012.724090>
- Hammond AS, Alba DM, **Almécija S**, Moyà-Solà S (2013). Middle Miocene *Pierolapithecus* provides a first glimpse into early hominid pelvic morphology. *Journal of Human Evolution* 64: 658-666. <https://doi.org/10.1016/j.jhevol.2013.03.002>
- Tallman S, **Almécija S**, Reber SL*, Alba DM, Moyà-Solà S (2013). The distal tibia of *Hispanopithecus laietanus*: more evidence for mosaic evolution in Miocene apes. *Journal of Human Evolution* 64: 319-327. <https://doi.org/10.1016/j.jhevol.2012.07.009>
- Almécija S**, Alba DM, Moyà-Solà S (2012). The thumb of Miocene apes: new insights from Castell de Barberà (Catalonia, Spain). *American Journal of Physical Anthropology* 148: 436-450. <https://doi.org/10.1002/ajpa.22071>
- Alba DM, **Almécija S**, Casanovas-Vilar I, Méndez JM, Moyà-Solà S (2012). A partial skeleton of the fossil great ape *Hispanopithecus laietanus* from Can Feu and the mosaic evolution of crown-hominoid positional behaviors. *PLoS ONE* 7: e39617. <https://doi.org/10.1371/journal.pone.0039617>
- Pina M*, Alba DM, **Almécija S**, Fortuny J, Moyà-Solà S (2012). Paleobiological inferences on the locomotor repertoire of extinct hominoids based on femoral neck cortical thickness: the fossil great ape *Hispanopithecus laietanus* as a test-case study. *American Journal of Physical Anthropology* 149: 142-148. <https://doi.org/10.1002/ajpa.22109>
- Alba David M, Casanovas-Vilar I, **Almécija S**, Robles JM, Arias-Martorell J*, Moyà-Solà S (2012). New dental remains of *Hispanopithecus laietanus* (Primates: Hominidae) from Can Llobateres 1 and the taxonomy of Late Miocene hominoids from the Vallès-Penedès Basin (NE Iberian Peninsula). *Journal of Human Evolution* 63: 231-246. <https://doi.org/10.1016/j.jhevol.2012.05.009>

- Alba DM, **Almécija S**, Moyà-Solà S (2011). A partial hominoid humerus from the middle Miocene of Castell de Barberà (Vallès-Penedès Basin, Catalonia, Spain). *American Journal of Physical Anthropology* 144: 365-381. <https://doi.org/10.1002/ajpa.21417>
- Almécija S**, Moyà-Solà S, Alba DM (2010). Early origin for human-like precision grasping: A comparative study of pollical distal phalanges in fossil hominins. *PLoS ONE* 5: e11727. <https://doi.org/10.1371/journal.pone.0011727>
- Alba DM, **Almécija S**, Moyà-Solà S (2010). Locomotor inferences in *Pierolapithecus* and *Hispanopithecus*: Reply to Deane and Begun (2008). *Journal of Human Evolution* 59: 143-149. <https://doi.org/10.1016/j.jhevol.2010.02.002>
- Robles JM, Alba DM, Moyà-Solà S, Casanovas-Vilar I, Galindo J, Rotgers C, **Almécija S**, Carmona R (2010). New craniodental remains of *Trocharion albanense* Major, 1903 (Carnivora, Mustelidae) from the Vallès-Penedès Basin (Middle to Late Miocene, Barcelona, Spain). *Journal of Vertebrate Paleontology* 30: 547-562. <https://doi.org/10.1080/02724631003617712>
- Alba DM, Moyà-Solà S, Malsosa A, Casanovas-Vilar I, Robles JM, **Almécija S**, Galindo J, Rotgers C, Bertó Mengual JV (2010). A new species of *Pliopithecus* Gervais, 1849 (Primates: Pliopithecidae) from the Middle Miocene (MN8) of Abocador de Can Mata (els Hostalets de Pierola, Catalonia, Spain). *American Journal of Physical Anthropology* 141: 52-75. <https://doi.org/10.1002/ajpa.21114>
- Almécija S**, Alba DM, Moyà-Solà S (2009). *Pierolapithecus* and the functional morphology of Miocene ape hand phalanges: paleobiological and evolutionary implications. *Journal of Human Evolution* 57: 284-297. <https://doi.org/10.1016/j.jhevol.2009.02.008>
- Moyà-Solà S, Alba DM, **Almécija S**, Casanovas-Vilar I, Köhler M, de Esteban-Trivigno S, Robles JM, Galindo J, Fortuny J (2009). A unique middle Miocene European hominoid and the origins of the great ape and human clade. *Proceedings of the National Academy of Sciences, U.S.A.* 106: 9601-9606. <https://doi.org/10.1073/pnas.0811730106>
- Moyà-Solà S, Köhler M, Alba DM, Casanovas-Vilar I, Galindo J, Robles JM, Cabrera LI, Garcés M, **Almécija S**, Beamud E (2009). First partial face and upper dentition of the Middle Miocene hominoid *Dryopithecus fontani* from abocador de Can Mata (Vallès-Penedès Basin, Catalonia, NE Spain): Taxonomic and phylogenetic implications. *American Journal of Physical Anthropology* 139: 126-145. <https://doi.org/10.1002/ajpa.20891>
- Casanovas-Vilar I, Alba DM, **Almécija S**, Robles JM, Galindo J, Moyà-Solà S (2008). Taxonomy and paleobiology of the genus *Chalicomys* Kaup, 1832 (Rodentia, Castoridae), with the description of a new species from Abocador de Can Mata (Vallès-Penedès Basin, Catalonia, Spain). *Journal of Vertebrate Paleontology* 28: 851-862. [https://doi.org/10.1671/0272-4634\(2008\)28\[851:TAPOTG\]2.0.CO;2](https://doi.org/10.1671/0272-4634(2008)28[851:TAPOTG]2.0.CO;2)
- Moyà-Solà S, Köhler M, Alba DM, **Almécija S** (2008). Taxonomic attribution of the Olduvai Hominid 7 manual remains and the functional interpretation of hand morphology in robust australopithecids. *Folia Primatologica* 79: 215-250. <https://doi.org/10.1159/000113458>
- Almécija S**, Alba DM, Moyà-Solà S, Köhler M (2007). Orang-like manual adaptations in the fossil hominoid *Hispanopithecus laietanus*: first steps towards great ape suspensory behaviours. *Proceedings of the Royal Society B* 274: 2375-2384. <https://doi.org/10.1098/rspb.2007.0750>
- Alba DM, Moyà-Solà S, Casanovas-Vilar I, Galindo J, Robles JM, Rotgers C, Furió M, Angelone C, Köhler M, Garcés M, Cabrera L, **Almécija S**, Obradó P (2006). Los vertebrados fósiles del Abocador de Can Mata (els Hostalets de Pierola, l'Anoia, Catalunya), una sucesión de localidades del Aragoniense superior (MN 6 y MN7+8) de la cuenca del Vallès-Penedès. Campañas 2002-2003, 2004 y 2005. *Estudios Geológicos* enero-diciembre: 295-312. <https://doi.org/10.3989/egeol.0662127>

Research abstracts — last 5 years (*indicates student co-author)

In press:

- Smith CM, Urciuoli A, Cazenave M, Braga J, Beaudet A, **Almécija S**, Laitman JT, Hammond AS (2024). Hammond. First insights into the inner ear otolith system of *Australopithecus* and *Paranthropus*. *American Journal of Physical Anthropology*.

- Post NW*, Pugh KD, Catalano SA, **Almécija S**, Hammond AS (2024). Preliminary study: A total-evidence approach to hominin phylogenetics using 3DGM data. *American Journal of Physical Anthropology*.
- Patel BA, Orr CM, **Almécija S**, Tocheri MW, Jungers WL (2024). Metacarpophalangeal joint orientation and function in extant anthropoids and fossil hominoids. *American Journal of Physical Anthropology*.
- Anaya A*, Ravier R*, **Almécija S**, Boyer DM (2023). Morphological differentiation of the hands and feet in primates: Implications for hind limb dominance. *American Journal of Physical Anthropology*.
- McKenzie S*, Sorbelli L*, Cherin M*, **Almécija S**, Pina M, Abella J, Luján AH, DeMiguel D, Alba DM (2023). Earliest Vallesian suid remains from Creu Conill 20 (Vallès-Penedès Basin, NE Iberian Peninsula). *American Journal of Physical Anthropology*.
- Pugh KD, Catalano SA, Pérez de los Ríos M, Fortuny J, Shearer BM, Vecina Gazabón A*, Hammond AS, Moyà-Solà S, Alba DM, **Almécija S** (2023). Evolutionary modeling of the hominid face. *American Journal of Physical Anthropology*.
- Smith CM*, Hammond AS, **Almécija S**, Curthoys I, Laitman JT (2023). The anthropoid otolith system: Uncovering the link between balance and posture in primates. *American Journal of Physical Anthropology*.

Published / Given:

- Argilés-Esturgó C*, Arias-Martorell J, **Almécija S**, Marigó J. The locomotion of the subfossil lemur *Mesopropithecus* (Madagascar): A 3D geometric morphometric study of the proximal humerus. *Palaeovertebrata*, Special Volume 1-23: 23-24. DOI: 10.18563/pv.eavp2023
- Arranz SG*, Casanovas-Vilar I, Zliobaitė I, DeMiguel D, McKenzie S*, Pina M, Sánchez IM, Moyà-Solà S, **Almécija S**, Alba DM. Functional dental traits provide new clues about the paleoenvironment of the earliest Vallesian site of Castell de Barberà (NE Iberian Peninsula). *Palaeovertebrata*, Special Volume 1-23: 26-27. DOI: 10.18563/pv.eavp2023
- Figuerola-Torrejón A*, **Almécija S**, Moyà-Solà S, Alba DM, Arias-Martorell J. Geometric morphometric analysis of the distal humerus of *Pliobates cataloniae*: Locomotor inferences and anthropoid elbow evolution. *Palaeovertebrata*, Special Volume 1-23: 86-87. DOI: 10.18563/pv.eavp2023
- McKenzie S*, Arranz SG*, **Almécija S**, DeMiguel D, Alba DM. Earliest Vallesian suid remains from Castell de Barberà (Vallès-Penedès Basin, NE Iberian Peninsula). *Palaeovertebrata*, Special Volume 1-23: 165-166. DOI: 10.18563/pv.eavp2023
- Raventós-Izard G*, **Almécija S**, Moyà-Solà S, Alba DM, Arias-Martorell J. The proximal ulnar morphology of the Miocene small-bodied catarrhine *Pliobates cataloniae*. *Palaeovertebrata*, Special Volume 1-23: 220-221. DOI: 10.18563/pv.eavp2023
- Catalano SA, Escapa I, Pol D, **Almécija S**. An integrative approach to analyzing the phylogenetic placement of fossils using scaffolds. Oral Dissertation. XXXIX Annual Meeting of the Willi Hennig Society. Helsinki (Finland). July 2022.
- Bouchet F*, Zanolli C, **Almécija S**, Fortuny J, Robles JM, Beaudet A, Moyà-Solà S, Alba DM (2022). New dental remains of the Miocene small-bodied catarrhine *Pliobates cataloniae*. *American Journal of Physical Anthropology* 177: 19-20.
- Pugh KD, Fortuny J, Shearer BM, Hammond AS, Moyà-Solà S, Alba DM, **Almécija S** (2022). A virtual reconstruction of the cranium of *Pierolapithecus catalaunicus*. *American Journal of Physical Anthropology* 177: 148-148.
- Smith CM*, Hammond AS, **Almécija S**, Laitman JT (2022). Comparative morphology of the hominid inner ear otolith system. *American Journal of Physical Anthropology* 177: 170-171.
- Urciuoli A, Zanolli C, Bouchet F, **Almécija S**, Moyà-Solà S, Alba DM. 2022. Semicircular canal morphology of the Miocene small-bodied catarrhine *Pliobates cataloniae*: Phylogenetic implications. *American Journal of Physical Anthropology* 177: 187-187.
- Boyle EK, **Almécija S** (2020). Variation in the anthropoid primate pelvis does not reflect differences in diet. *American Journal of Physical Anthropology* 171: 34-34.
- García-Martínez D, Torres-Tamayo N, Nalla S, Alba D, Moyà-Solà S, **Almécija S**, Bastir M (2020). Did *Pierolapithecus* have an ape-like thorax? 3D shape analysis of the *Pierolapithecus catalaunicus*

- lower rib IPS21350.58 and its implications for understating its bauplan. *American Journal of Physical Anthropology* 171: 96-97.
- Püschel TA, Marcè-Noguè J, Gladman J, Patel BA, **Almécija S**, Sellers WI (2020). Elucidating *Paralouatta*'s semi-terrestriality using the virtual morpho-functional toolbox. *American Journal of Physical Anthropology* 171: 225-225.
- Thompson NE, **Almécija S** (2020). Estimating ground reaction force position in the knuckle-walking chimpanzee hand. *American Journal of Physical Anthropology* 171: 283-283.
- Wennemann SE, Lewton KL, Orr CM, **Almécija S**, Patel BA (2020). A geometric morphometric approach to quantify the longitudinal curvature of primate proximal phalanges from 3D surface data. *American Journal of Physical Anthropology* 171: 305-305.
- Boyle EK*, **Almécija S** (2019). Testing hypotheses about the relationships between diet and the primate torso: Implications for human evolution. *American Journal of Physical Anthropology* 168 (S68): 27-27.
- Hammond AS, Rook L, Moyà-Solà S, and **Almécija S** (2019). The *Oreopithecus bambolii* (IGF 11778) lumbar region: Revised anatomy. *American Journal of Physical Anthropology* 168 (S68): 96-97.
- Urciuoli A*, Zanolli C, Begun D, **Almécija S**, Dumoncel J, Moyà-Solà S, and Alba DM (2019). A deformation-based geometric morphometric analysis of the vestibular apparatus in the Miocene apes *Hispanopithecus laietanus* and *Rudapithecus hungaricus*. *American Journal of Physical Anthropology* 168 (S68): 253-253.

Organizing committee of courses and symposia

- 2011 Course: 'Introduction to geometric morphometrics'. Museum of the Institut Català de Paleontologia Miquel Crusafont.
- 2010 Symposium 'Miocene hominoids: Understanding the evolutionary history of apes and humans', in International Primatological Society XXIII Congress Kyoto.
- 2009 I Iberian Symposium on Geometric Morphometrics. Institut Català de Paleontologia (Sabadell, Spain).
- 2009 Course: 'Introduction to geometric morphometrics: theoretical background and basic analytical techniques'. July 20-22
- 2007 III Meeting of Junior Paleontology Researchers. Fumanya (Barcelona, Spain).

Fieldwork

- 2016-2023: Late Miocene of Creu Conill (Terrassa, Spain). Co-director campaigns 2016-2019.
- 2019: 3D kinematics of locomotion in wild orangutans (Tuanan, Borneo; Medan, Sumatra). Co-director.
- 2017: Paleontological and geological exploration of the Lower Semliki (DR Congo). Director.
- 2016, 2017: 4D Videogrammetry of wild mountain gorilla locomotion (Bwindi Impenetrable Forest, Uganda). Co-director.
- 2014, 2015: Middle/Late Miocene of Castell de Barberà (Barberà del Vallès, Spain). Co-director.
- 2011-2013: Late Miocene of Can Llobateres (Sabadell, Spain). Co-director.
- 2005-2007: Early Pleistocene of Vallparadís (Terrassa, Spain).
- 2004-2009: Middle Miocene of Dipòsit controlat de Can Mata. Els Hostalets de Pierola (Barcelona, Spain). Co-director campaign 2005.
- 2004, 2005, 2009: Early Pleistocene of Incarcal. Crespià (Girona, Spain).
- 2004: Pliocene of Almenara. Comunitat Valenciana (Spain).
- 2003-2006: Late Pleistocene of Pinilla del Valle. Madrid (Spain).
- 2002: Late Pleistocene Vendimia Archaeological Project: The first Extremadura settlements. Malpartida (Cáceres, Spain).
- 2002: Miocene of Fortuna Basin (Murcia, Spain). Institut de Paleontologia Miquel Crusafont. Sabadell (Spain).
- 2001-2003, 2013: Early Pleistocene. Geology, Paleontology and Archaeology of the Guadix-Baza Basin. (Orce, Granada, Spain).

Invited lectures (selected)

- Almécija S** (2021). [Fossil apes and human evolution](#). University of Oxford (UK).
- Almécija S** (2021). A conversation about fossil apes and human origins. The Graduate Center, CUNY (New York, US).
- Almécija S** (2021). The starting point of human evolution. The George Washington University (Washington DC, US).
- Almécija S** (2019). The divergence of apes and humans: A paleontological perspective. Yale University (New Haven, US).
- Almécija S** (2018). From apes to humans: Key transitions in human evolution. University of Southern California. Paleoanthropology Seminar Series (Los Angeles, CA, US).
- Almécija S** (2018). From apes to humans: Key transitions in human evolution. University of Oregon (Eugene, OR, US).
- Almécija S** (2018). From apes to humans: Key transitions in human evolution. American Museum of Natural History (New York, NY, US).
- Almécija S** (2016). The last common ancestor of apes and humans: What the fossils have to say. Stony Brook University (Stony Brook, NY, US).
- Almécija S** (2015). The last common ancestor of chimpanzees and humans: A paleontological viewpoint. Smithsonian Institution (Washington, DC, US).
- Almécija S** (2014). Fossil apes and early hominins: some thoughts on postcranial evolution. Department of Human Evolutionary Biology, Harvard University (Cambridge, Massachusetts, US).
- Almécija S** (2014). Origins of human hand proportions. Department of Anthropology, University of Connecticut (Storrs, Connecticut, US).
- Almécija S** (2012). Locomotor evolution in Miocene apes: a perspective from the hand. Department of Pathology & Anatomical Sciences, University of Missouri (Columbia, US).
- Almécija S** (2012). Evolution of the hand in Miocene apes: Implications for early hominin hand morphology and use. The Graduate Center, CUNY (New York, US).

Student mentoring

Postdoctoral researchers

Christopher Smith

Date and location: 2023–present. American Museum of Natural History, Division of Anthropology.

Achievements: His first paper with my lab is being submitted to *Nature Communications*.

Kelsey Pugh

Date and location: 2020–2023. American Museum of Natural History, Division of Anthropology.

Achievements: Kelsey developed new skills in 3D morphometrics, imaging, and evolutionary modeling. During her tenure in my lab, she co-authored papers in *Science*, *PNAS* (lead author), *Nature Ecology & Evolution*, *Proceedings B*, and *Journal of Human Evolution*. She earned a permanent position at Brooklyn College (New York).

Graduate students

Marie Vanhoof (PhD committee)

Date and location: September 19th, 2023. University of Leuven (Belgium), Department of Development and Regeneration.

Dissertation title: 3D kinematics and functional morphology of the primate wrist.

Julia Armendi Picado (PhD committee)

Date and location: October 6th, 2021. Universidad Complutense de Madrid (UCM, Geography and History Department).

Dissertation title: A new morphometric approach to the study of Plio-Pleistocene hominin biomechanics and adaptation.

Joan Femenias (PhD committee)

Date and location: September 9th, 2020. Institut Català de Paleontologia Miquel Crusafont (ICP, Barcelona) and Universitat Autònoma de Barcelona (UAB, Animal Biology, Vegetal Biology and Ecology Department; Doctorate in Biodiversity).

Dissertation title: The new genus *Agerina* (Primates, Adapiformes) and its evolution during the early Eocene of NE Iberian Peninsula.

Shubham Pal (MS co-advisor)

Date and location: July 14th, 2020. Institut Català de Paleontologia Miquel Crusafont (ICP, Barcelona), Universitat Autònoma de Barcelona (UAB), and Universitat de Barcelona (UB). Master program in Paleobiology and Fossil Record.

Dissertation title: Talocrural functional morphology and evolution in Hominoidea.

Kelly Ostrofsky (PhD advisor)

Date and location: June 2019. Center for the Advanced Study of Human Paleobiology (CASHP) at The George Washington University (Washington DC).

Dissertation title: Using Behavioral and Kinematic Methods to Characterize Arboreal Behavior of Bwindi Mountain Gorillas.

Achievements: Kelly's research was funded by the National Science Foundation – Graduate Research Fellowship Program (NSF GRFP) and Dissertation Improvement Grant (NSF-DDRI), The Leakey Foundation, and other smaller foundations. She has already co-authored research articles in *Science*, *Scientific Reports* and *Journal of Human Evolution*, as well as in several book chapters.

Eve Boyle (PhD co-advisor)

Date and location: June 2019. Center for the Advanced Study of Human Paleobiology (CASHP) at The George Washington University (Washington DC).

Dissertation title: Beyond the skull: Identifying potential correlates of diet in the primate torso. The George Washington University.

Achievements: Eve's research was funded by the National Science Foundation – Graduate Research Fellowship Program (NSF GRFP). Eve has already published her research in journals like *PaleoAnthropology*, *Journal of Human Evolution*, and *Yearbook of Physical Anthropology*.

Daniel Wawrzyniak (MS advisor)

Date and location: January 2019. Center for the Advanced Study of Human Paleobiology (CASHP) at The George Washington University (Washington DC).

Dissertation title: The evolution of body size in the diverse lesser apes.

Cassandra Turcotte (PhD committee)

Date and location: January 2019. Center for the Advanced Study of Human Paleobiology (CASHP) at The George Washington University (Washington DC).

Dissertation title: Behavioral reconstruction and the bone-muscle interface: A multilevel analysis of the effects of habitual activity on entheses.

Achievements: Her research was funded by the NSF-DDRI program.

Alexander Prucha (MS advisor)

Date and location: August 2018. Center for the Advanced Study of Human Paleobiology (CASHP) at The George Washington University (Washington DC).

Dissertation title: Familiar faces: Reconstructing anthropoid facial skeletal evolution, and predicting the last common ancestors of apes and humans.

Angie Peña (MS co-advisor)

Date and location: August 2018. Center for the Advanced Study of Human Paleobiology (CASHP) at The George Washington University (Washington DC).

Dissertation title: Patterns of integration and modularity in the hominoid wrist. The George Washington University.

Vance Powell (PhD committee)

Date and location: August 2018. Center for the Advanced Study of Human Paleobiology (CASHP) at The George Washington University (Washington DC).

Dissertation title: Patterns of covariation and covariance in the hominoid limb skeleton: Implications for hominin evolution. The George Washington University.

Achievements: Vance's research was funded by the National Science Foundation–Graduate Research Fellowship Program (NSF GRFP).

Lawrence Fatica (MS co-advisor)

Date and location: December 2017. Center for the Advanced Study of Human Paleobiology (CASHP) at The George Washington University (Washington DC).

Dissertation title: Skeletal phenotypic variation in *Gorilla*: Ecological, phylogenetic, and phylogenetic perspectives. The George Washington University.

Marta Pina (PhD co-advisor)

Date and location: June 2016. Institut Català de Paleontologia Miquel Crusafont (ICP, Barcelona), and Universitat Autònoma de Barcelona (UAB).

Dissertation title: Unraveling the positional behavior of fossil hominoids: morphofunctional and structural analyses of the primate hindlimb.

Achievements: Marta's dissertation was fully-funded by the Spanish government, the European Union (via the Synthesys project), and the Leakey Foundation. During her dissertation, she co-authored multiple publications in international journals (e.g., *American Journal of Physical Anthropology*, *PLoS ONE*, *Nature Communications*, *Science*).

Ivette Susanna (MS co-advisor)

Date and location: June 2016. Institut Català de Paleontologia Miquel Crusafont (ICP, Barcelona), and Universitat Autònoma de Barcelona (UAB).

Dissertation title: Vertebral morphology in Miocene apes and early hominins: Evolutionary and functional implications. Universitat Autònoma de Barcelona. June 2016.

Achievements: Her research was funded by the European Union (via the Synthesys project). During her master's, she produced multiple abstracts in international meetings and a paper published in the *Journal of Human Evolution*.

Peter Fernández (Ph.D. committee)

Date and location: May 2016. Stony Brook University (New York).

Dissertation title: Form and function of the anthropoid forefoot.

Achievements: Peter's research was funded by the Wenner-Gren Foundation, and produced articles for the *Journal of Human Evolution*, *Scientific Reports*, and *PNAS*.

Undergraduate students

Alisha Anaya

Date and location: 2015–2018. Biological Anthropology, The George Washington University (Washington DC).

Achievements: She learned how to run surface 3D scanners and imaging software. She also wrote her own paper about the evolution of the human foot, now published in the *Journal of Human Evolution*.

Susanna Israelsson

Date and location: 2016–2018. Biological Anthropology, The George Washington University.

Achievements: Susanna obtained the prestigious Luther Rice Undergraduate Research Fellowship to conduct research in my lab related to the evolution of sexual dimorphism in apes and humans.

Elly Cordiner

Date and location: 2016–2018. Biological Anthropology, The George Washington University.

Achievements: She learned how to run surface 3D scanners and imaging software. She developed her skills in primate comparative anatomy, which secured her a permanent job.

Teaching (selected)

Graduate

ANTH 6491, Research Design in Biological Anthropology. The George Washington University. Graduate-level course (open to upper-level undergraduates) providing hands-on research design and publication. Spring 2018.

ANTH 6101, Proseminars in Biological Anthropology. The George Washington University. Graduate-level course revising and discussing the literature relevant to general topics in Biological Anthropology with Sociocultural Anthropology students. Spring 2018.

ANTH 3491–6491, Debates in Evolutionary Anthropology. The George Washington University. Director of an upper-level undergraduate and graduate-level course revising the primary literature relevant to the most contentious topics in the field of Evolutionary Anthropology. Spring 2017.

ANTH 6491, Primate Evolution. The George Washington University. Director of a graduate course inspecting key evolutionary events in the primate tree of life. Spring 2017.

HOMP 6201, Hominid Paleobiology. The George Washington University. Director of a graduate course on ape and human fossil adaptation and evolution. Fall 2015, fall 2017.

Guest lecturer for the Human Evolutionary Anatomy graduate course at the Interdepartmental Program in Anthropological Sciences (IDPAS) at Stony Brook University. November 2013
Guest lecturer for the Primate Evolution graduate course at the American Museum of Natural History (AMNH), via the New York Consortium in Evolutionary Primatology (NYCEP). February 2012

Undergraduate

ANTH 3412, Hominin Evolution. The George Washington University. Director of an undergraduate course on human evolutionary theory. Fall 2016, fall 2017.

Media appearance (selected)

Featured on *The New York Times* about the extinction of the giant ape *Gigantopithecus* (1/10/2024)
[The Biggest Ape That Ever Lived Was Not Too Big to Fail.](#)

Press on my study about the virtual reconstruction of the fossil great ape *Pierolapithecus*

<https://doi.org/10.1073/pnas.2218778120>

The Washington Post

[Scientists reconstructed the face of a 12 million-year-old great ape](#)

Gizmodo

[Scientists reconstruct 12-million-year-old ape skull](#)

Coverage of “HUMANS” (Almécija ed. 2023 *Columbia University Press*)

<http://cup.columbia.edu/book/humans/9780231201216>

The book has been featured in several venues, including [Publishers Weekly](#), [Everything Dinosaur](#), and the [Paleontological Society](#).

Press on my study about fossil apes and human origins (Almécija et al., 2021 *Science*)

<https://doi.org/10.1126/science.abb4363>

Science (summary video)

[Earth was once a planet of the apes—and they set the stage for human evolution](#)

Sci-News

[Hominins Originated in Africa from Ape Ancestors Unlike Any Living Species, Study Suggests](#)

Opinion on a new fossil hominoid from Europe: *Danuvius* (Böhme et al. 2019 *Nature*)

Nature

[Ancient ape offers clues to evolution of two-legged walking](#)

NewScientist

[Did apes first walk upright on two legs in Europe, not Africa?](#)

Opinion on a study about human hand development (Diogo et al. 2019 *Development*)

BBC News

[Babies in the womb have lizard-like hand muscles](#)

Opinion on the implications of the new remains of the fossil great ape *Rudapithecus* for human evolution:

New Scientist

[Mystery of why humans walk upright may be explained by surprise fossil](#)

Opinion about the meaning and history of the early hominin *Orrorin tugenensis* fossils:

Le Monde

[Mais où est donc passé «Orrorin», ce fossile disparu?](#)

Opinion on study about bonobo locomotor behaviors (Samuel et al. 2018 *J. Exp. Biol.*)

NewScientist

[Bonobos barely use their opposable thumbs when climbing trees](#)

Press on my study about the mosaic evolution of the human foot (Fernández et al., *PNAS*)
<https://doi.org/10.1073/pnas.1800818115>

BBC News

[Being human: Big toe clung on longest to primate origins](#)

Opinion of purported first European 'hominins':

National Geographic

[Ancient Teeth found in Europe belonged to mystery primate](#)

Press on our study about *Pliobates cataloniae*: Alba, Almécija, et al., 2015 *Science*
<https://doi.org/10.1126/science.aab2625>

BBC News (live interview with Sergio Almécija)

['Newsday'](#)

Gizmodo

[This Extinct Species is Changing What We Know About Early Ape Evolution](#)

Press on our study about the first human-like hand (Domínguez-Rodrigo et al., 2015 *NatCommun*)
<https://doi.org/10.1038/ncomms8987>

CBS News

[Earliest human hand bone unearthed in Africa](#)

The Washington Post

[Scientist's find the oldest-ever hand bone to resemble a modern human's](#)

New Scientist

[Oldest hand hints we came down from trees earlier than thought](#)

Mirror

[World's oldest finger dating back almost two million years dug up in Africa](#)

Press my study about the evolution of the human hand (Almécija et al., 2015 *NatCommun*)
<https://doi.org/10.1038/ncomms8717>

Nature

[Hands hold clues to primate evolution](#)

Science

[Humans have more primitive hands than chimpanzees](#)

NBC News

[Chimps Might Have More Evolved Hands Than Humans](#)

IFL Science!

[Human Hands Are More Primitive Than Chimpanzee's](#)

BBC

[Chimpanzees and monkeys have entered the Stone Age](#)

Discovery News

[Human Hands More Primitive Than Chimpanzee Hands](#)

USA Today

[Chimps are more advanced than us in one specific way](#)

The Scientist

[Our Primitive Hands](#)

Press on my study of *Orrorin tugenensis* and human bipedalism (Almécija et al., 2013 *NatCommun*)
<https://doi.org/10.1038/ncomms3888>

Scientific American

[The Most Fascinating Human Evolution Discoveries of 2013](#)

Nature

[Evolution: One giant step for bipedalism](#)

Science Daily

[Early tree-dwelling bipedal human ancestor was similar to ancient apes and 'Lucy' but not living apes](#)

Phys.org

[Human ancestor was less chimp-like than thought: study](#)
The Scientist
[Bipedal Beginnings](#)

Press on my paper on the thumb morphology of early hominins (Almécija et al., 2010 *PLoS ONE*)
<https://doi.org/10.1371/journal.pone.0011727>

Science News

[For ancient hominids, thumbs up on precision grip](#)

The Free Library

[Ancient hominids developed humanlike grip much before toolmaking practice](#)

Press on my study of the fossil ape *Hispanopithecus laietanus* (Almécija et al., 2007 *ProceedingsB*)
<https://doi.org/10.1098/rspb.2007.0750>

New Scientist

[Ancient ape was an early swinger](#)

Phys.org

[An early ape shows its hand](#)

Science Popularization & Outreach (selected)

2023: Interview for Talking Apes Podcast. [Ancient Us: The Evolutionary Journey of Apes with Dr Sergio Almécija | S3E50](#).

2023: Video interview for World of Paleoanthropology. [Humans - Perspectives on our Evolution from World Experts with Sergio Almécija](#).

2021-present: [TIMEremix.com](#): Online essays about humans, evolution, and life.

2021: Participated in *ScienceDelivered!* [STEMTradingCards.org](#): [Dr. Sergio Almécija](#)

“The project hosts a database of incredible people in STEM careers who are featured on Science Delivered’s STEM Trading Cards, as well as free resources for K-5+ science for classrooms and families.”

2021: Consulted for the upcoming UK TV show *Impossible Animals*. **Producer:** [Offspring Films](#).

2021: AMNH’s *Seminars on Science*. Museum’s online professional development program for teachers. Wrote essay: “The origin and evolution of the human lineage.”

2020: Ciencia.es | Hablando con Científicos (Spanish podcast). [Antecedentes de la evolución humana. Hablamos con Sergio Almécija](#).

2019: I was featured on the documentary [The Secret History of Our Evolution](#) (Mona Lisa Production).

2018: Live appearance on ‘124 News’ to discuss the Brazil Museum Fire (2018-9-4).

2014: Ideomica podcast series (Spanish). Naukas (ciencia escepticismo y humor). [El robo de los fósiles de Orrorin, Crowdfunding de ciencia, el mural de Catalhöyük y más.](#)

Service and other

Editorial board

2016-present: Anthropological Science (The Anthropological Society of Nippon).

2019-2021: Journal of Human Evolution.

Journal referee

American Journal of Physical Anthropology, Anatomical Record, Biological Journal of the Linnean Society, Biological Reviews, eLife, Evolutionary Anthropology, Journal of Human Evolution, Journal of the Royal Society Interface, Nature Ecology & Evolution, Nature Scientific Reports, PeerJ, PLoS ONE, Proceedings of the National Academy of Sciences, Science, Sciences Advances.

Grants referee

European Research Council, Swiss National Science Foundation, The Leakey Foundation.

Professional memberships

American Association of Physical Anthropology, Paleoanthropology Society, Society for Vertebrate Paleontology.

Other committee service

2019–current: AMNH “James Arthur Fund” for the Evolution of the Human Brain.

2019, 2022, 2024: AMNH “Niarchos” and “Explore21” fellowships.