# Thomas A. Püschel

Leverhulme Early Career Fellowship, University of Oxford

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#### **Education**

University of Manchester, PhD. Adaptive Organismal Biology
 Hull York Medical School, MSc. Human Evolution with Distinction
 Universidad de Chile, BSc. Biological Anthropology
 2007-2011

## Work experience

School of Anthropology and Museum Ethnography, University of Oxford, UK

Postdoctoral Research Officer - Leverhulme Early Career Fellowship 2018-Present

St Antony's College, Oxford, UK

College advisor 2018-Present

University of Manchester, UK

Research Officer 2017-2018

# Peer-reviewed publications

**JOURNAL ARTICLES** 

- 1. Bucchi, A., **Püschel, T. A.**, Lorenzo, C., & Marcé-Nogué, J. (2020). Finite element analysis of the proximal phalanx of the thumb in Hominoidea during simulated stone tool use. *Comptes Rendus Palevol*, 19(2), 26–39.
- 2. **Püschel, T. A.**, Marcé-Nogué, J., Gladman, J., Patel, B. A., Almécija, S., & Sellers, W. I. (2020). Getting its feet on the ground: Elucidating Paralouatta's semi-terrestriality ssing the virtual morpho-functional toolbox. *Frontiers in Earth Science*, 8.
- 3. Marcé-Nogué, J., **Püschel, T. A.**, Daasch, A., & Kaiser, T. M. (2020). Broad-scale morphofunctional traits of the mandible suggest no hard food adaptation in the hominin lineage. *Scientific Reports*, 10(1), 1–11.
- 4. **Püschel, T. A.**, Marcé-Nogué, J., Chamberlain, A. T., Yoxall, A., & Sellers, W. I. (2020). The biomechanical importance of the scaphoid-centrale fusion during simulated knucklewalking and its implications for human locomotor evolution. *Scientific Reports*, 10(1), 1–7.
- 5. **Püschel, T. A.**, Friess, M., & Manríquez, G. (2020). Morphological consequences of artificial cranial deformation: Modularity and integration. *PLOS ONE*, 15(1), e0227362.
- 6. **Püschel T. A.**, Marcé-Nogué J., Gladman J. T., Bobe R., & Sellers W. I. (2018). Inferring locomotor behaviours in Miocene New World monkeys using finite element analysis, geometric morphometrics and machine-learning classification techniques applied to talar morphology. *Journal of The Royal Society Interface*, 15(146), 20180520.

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- 7. Benítez, H. A., Lemic, D., **Püschel, T. A.**, Virić Gašparić, H., Kos, T., Barić, B., Pajač Živković, I. (2018). Fluctuating asymmetry indicates levels of disturbance between agricultural productions: An example in Croatian population of Pterostichus melas melas (Coleptera: Carabidae). *Zoologischer Anzeiger*, 276, 42–49.
- 8. **Püschel, T. A.**, Marcé-Nogué, J., Kaiser, T. M., Brocklehurst, R. J., & Sellers, W. I. (n.d.). Analyzing the sclerocarpy adaptations of the Pitheciidae mandible. *American Journal of Primatology*, o(o), e22759.
- 9. **Püschel, T. A.**, Gladman, J. T., Bobe, R., & Sellers, W. I. (2017). The evolution of the platyrrhine talus: A comparative analysis of the phenetic affinities of the Miocene platyrrhines with their modern relatives. *Journal of Human Evolution*, 111, 179–201.
- 10. Marcé-Nogué, J., **Püschel, T. A.**, & Kaiser, T. M. (2017). A biomechanical approach to understand the ecomorphological relationship between primate mandibles and diet. *Scientific Reports*, 7(1), 8364.
- 11. Püschel, H. P., **Püschel, T. A.**, & Rubilar-Rogers, D. (2017). Taxonomic Comments of a Glossotherium Specimen from the Pleistocene of Central Chile. Boletín Del Museo Nacional de Historia Natural, Chile, 66(2), 223–262.
- 12. Marcé-Nogué, J., Esteban-Trivigno, S. D., **Püschel, T. A.**, & Fortuny, J. (2017). The intervals method: A new approach to analyse finite element outputs using multivariate statistics. *PeerJ*, 5, e3793.
- 13. **Püschel, T. A.**, & Sellers, W. I. (2016). Standing on the shoulders of apes: Analyzing the form and function of the hominoid scapula using geometric morphometrics and finite element analysis. *American Journal of Physical Anthropology*, 159(2), 325–341.
- 14. Bucchi, A., **Püschel, T. A.**, & Manríquez, G. (2016). Artificial Cranial Modification in San Pedro de Atacama and the Loa Basin: A Quantitative Approach to Its Role as a Marker of Social Identity. *Revista Chilena de Antropología*, 34(2), 19–30.
- 15. Benítez, H. A., Vargas, H. A., & **Püschel, T. A.** (2015). Left–right asymmetry and morphological consequences of a host shift in the oligophagous Neotropical moth Macaria mirthae (Lepidoptera: Geometridae). *Journal of Insect Conservation*, 1–10.
- 16. **Püschel, T. A.** (2014). Modularidad e Integración Morfológica en Cráneos Humanos: Un Enfoque Morfométrico Geométrico. *International Journal of Morphology*, 32(1), 299–304.
- 17. **Püschel, T. A.**, & Benítez, H. A. (2014). Femoral Functional Adaptation: A Comparison Between Hunter Gatherers and Agriculturalists Using Geometric Morphometrics. *International Journal of Morphology*, 32(2), 627–633.
- 18. Benítez, H. A., **Püschel, T.A.**, Lemic, D., Čačija, M., Kozina, A., & Bažok, R. (2014). Ecomorphological Variation of the Wireworm Cephalic Capsule: Studying the Interaction of Environment and Geometric Shape. *PLOS ONE*, 9(7), e102059.
- 19. Benítez, H. A., Lemic, D., Bažok, R., Bravi, R., Buketa, M., & **Püschel, T.A.** (2014). Morphological integration and modularity in Diabrotica virgifera virgifera LeConte (Coleoptera: Chrysomelidae) hind wings. *Zoologischer Anzeiger A Journal of Comparative Zoology*, 253(6), 461–468.

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- 20. Benítez, H. A., & **Püschel, T. A.** (2014). Modelando la Varianza de la Forma: Morfometría Geométrica Aplicaciones en Biología Evolutiva. *International Journal of Morphology*, 32(3), 998–1008.
- 21. **Püschel, T. A.**, Espejo, J., Sanzana, M.-J., & Benítez, H. A. (2014). Analysing the Floral Elements of the Lost Tree of Easter Island: A Morphometric Comparison between the Remaining Ex-Situ Lines of the Endemic Extinct Species Sophora toromiro. *PLOS ONE*, 9(12), e115548.

#### BOOK CHAPTERS

1. Manríquez, G., **Püschel, T. A.**, Flores, S., González, T., Moraga, M., & Rothhammer, F. (2016). Origen y evolución de la población chilena: El punto de vista biológico. In F. Fallabela, M. Uribe, C. Aldunate, & J. Hidalgo (Eds.), *Prehistoria en Chile: Desde sus Primeros Habitantes hasta los Incas*. Editorial Universitaria.

## **Scholarships**

- 1. Becas Chile PhD scholarship (2014-2018), National Commission for Scientific and Technological Research of Chile. 2014-2018
- 2. Becas Chile Master scholarship (2012-2013), National Commission for Scientific and Technological Research of Chile. 2012-2013
- 3. ECOS-CONICYT scholarship for an Internship at the Musée de l'Homme, Muséum d'Histoire Naturelle, Paris.

#### Grants and awards

- 1. SYNTHESYS+ Transnational Access (BE-TAF-8207) grant for access to the Royal Museum for Central Africa, Tervuren, Belgium.
- SAME, University of Oxford Award for Excellence 2020. Award for Excellence of the School
  of Anthropology and Museum Ethnography, University of Oxford in recognition of my
  exceptional contribution to the department.
- 3. *The Boise Trust Fund Research Award*. Research fund awarded by the Department of Zoology of the University of Oxford.
- 4. *The Boise Trust Fund Research Award*. Research fund awarded by the Department of Zoology of the University of Oxford.
- 5. Leverhulme Early Career Fellowship (ECF-2018-264). Postdoctoral fellowship. 2018-2021
- 6. SYNTHESYS+ Transnational Access (BE-TAF-4459) grant for access to the Royal Museum for Central Africa, Tervuren, Belgium.

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