

Curriculum Vitae - Thomas Püschel

1. PERSONAL INFORMATION:

NAME: Thomas Alfred Puschel Rouliez.
PLACE AND DATE OF BIRTH: Santiago, Chile, 07 March 1988
NATIONALITY: Chilean
E-MAIL: thomas.puschel@postgrad.manchester.ac.uk

2. RESEARCH INTERESTS: My main research focus is primate evolutionary morphology, although I am also interested in the phenotypic evolution of other organisms. I apply geometric morphometrics, virtual biomechanical techniques, phylogenetic comparative methods and field research to reconstruct and compare the paleobiology of extinct primates to their living ecological relatives.

2. EDUCATION:

2.1. UNIVERSITY STUDIES LEADING TO ACADEMIC DEGREE, PROFESSIONAL DEGREE OR DIPLOMA:

Department of Anthropology, Universidad de Chile
Academic Degree: Bachelor's Degree in Anthropology, Major in Physical Anthropology with Distinction.
Subject Area / Specialization: Geometric Morphometrics and Bioarchaeology.
Supervisor: Dr. Germán Manríquez.
2007-2011

Hull York Medical School, University of York.
Academic Degree: MSc in Human Evolution with Distinction.
Subject Area / Specialization: Biomechanics and Geometric Morphometrics
Supervisor: Prof. Paul O'Higgins.
2012-2013

Faculty of Life Sciences, University of Manchester.
Academic Degree: PhD candidate in Adaptive Organismal Biology
Subject Area / Specialization: Ecomorphological analyses of living and fossil primates using comparative methods, geometric morphometrics and virtual biomechanical techniques to reconstruct and compare the paleobiology of extinct primates to their living ecological relatives.
Supervisor: Dr. William Sellers
Co-supervisor: Prof. Christian Peter Klingenberg.

3. SCHOLARSHIPS AND GRANTS:

1. ECOS-CONICYT scholarship for an Internship in the context of the bilateral cooperation project Ecos-Conicyt “Les découvertes archéologiques de la mission scientifique de Georges de Créqui-Montfort et d’Eugène Sénéchal de la Grange (1903) dans la nécropole de Calama (Désert d’Atacama), Chili”. Laboratory of Dr. Martin Friess, Musée de l’Homme, Muséum d’Histoire Naturelle, Paris.
June 2012.
2. Becas Chile. Full Master Scholarship for studies in the MSc in Human Evolution, Hull York Medical School. 2012-2013.
3. Becas Chile. Full PhD Scholarship for studies in the PhD in Adaptive Organismal Biology, University of Manchester. 2014-2018.
4. Synthesis Access Project (European Union-funded Integrated Activities grant). BE-TAF-4459 grant for access to the Royal Museum for Central Africa, Tervuren (BE-TAF) under the SYNTHESYS Project.
March 2015.

4. PUBLICATIONS

4.1 PEER-REVIEWED JOURNALS

1. Benítez HA, Lemic D, Bažok R, Bravi R, Buketa M, Püschel T. 2014. Morphological integration and modularity in *Diabrotica virgifera virgifera* LeConte (Coleoptera: Chrysomelidae) hind wings. *Zoologischer Anzeiger - A Journal of Comparative Zoology* 253:461–468.
2. Benítez HA, Püschel T, 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:e102059.
3. Benítez HA, Püschel TA. 2014. Modelando la Varianza de la Forma: Morfometría Geométrica Aplicaciones en Biología Evolutiva. *International Journal of Morphology* 32:998–1008.
4. Benítez HA, Vargas HA, Püschel TA. 2015. Left–right asymmetry and morphological consequences of a host shift in the oligophagous Neotropical moth *Macaria mirthae* (Lepidoptera: Geometridae). *J Insect Conserv*:1–10.
5. Burchi A, Püschel TA, 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 (PDF Download Available). *Revista Chilena de Antropología* 34:19–30.
6. Marcé-Nogué J, Püschel TA, Kaiser TM. 2017. A biomechanical approach to understand the ecomorphological relationship between primate mandibles and diet. *Scientific Reports* 7:8364.
7. Püschel HP, Püschel TA, Rubilar-Rogers D. 2017. Taxonomic Comments of a *Glossotherium* Specimen from the Pleistocene of Central Chile. *Boletín del Museo Nacional de Historia Natural, Chile* 66:223–262.
8. Püschel T. 2014. Modularidad e Integración Morfológica en Cráneos Humanos: un Enfoque Morfométrico Geométrico. *International Journal of Morphology* 32:299–304.
9. Püschel TA, Benítez HA. 2014. Femoral Functional Adaptation: A Comparison Between Hunter Gatherers and Agriculturalists Using Geometric Morphometrics. *International Journal of Morphology* 32:627–633.

10. Püschel TA, Espejo J, Sanzana M-J, Benítez HA. 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:e115548.
11. Püschel TA, Gladman JT, Bobe R, Sellers WI. 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.
12. Püschel TA, Sellers WI. 2016. Standing on the shoulders of apes: Analyzing the form and function of the hominoid scapula using geometric morphometrics and finite element analysis. *Am J Phys Anthropol* 159:325–341.
13. Püschel, TA, Marcé-Nogué J, Kaiser T, Brocklehurst R, Sellers, WI. Under review. Sclerocarpus Adaptations of the Pitheciidae Mandible: Analyzing the Morpho-functional Consequences of Seed Predation in the Pitheciid lower Jaw using Finite Element Analysis and Geometric Morphometrics.
14. Intervals' method: A new approach to analyse Finite Element outputs using multivariate statistics. Accepted. Marcé-Nogué J, De Esteban-Trivigno S, Püschel TA, Fortuny J. PeerJ.

4.2 BOOK CHAPTERS

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