CHI ZHANG

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CURRENT POSITION

Fellow - PhD, Research (postdoctoral researcher)

May 2021 to present

The Murat Maga Laboratory, Center for Developmental Biology and Regenerative Medicine, Seattle Children's Research Institute, Seattle, WA

EDUCATION

PhD (Biological Anthropology)

April 2020

University of Pittsburgh, Pittsburgh, PA Academic advisor: Dr. Jeffrey Schwartz

Dissertation: A critical assessment of sampling biases in geometric morphometric analysis: the case

of Homo erectus (Link: http://d-scholarship.pitt.edu/38434/)

Bachelor of Science (Telecommunication Engineering)

May 2012

Nanjing University of Posts & Telecommunications, Nanjing, Jiangsu, China

PROFESSIONAL EXPERIENCE

Collaborating member

August 2020 - April 2021

The Richtsmeier Laboratory, Department of Anthropology, The Pennsylvania State University, University Park, PA

Instructor Fall 2020

Department of Anthropology, University of Pittsburgh, Pittsburgh, PA Human Origins (ANTH 1603)

Duties: Fully responsible for the course; created and led lectures, led reading discussions, constructed and grade exams, mentoring students writing term-papers

Teaching Fellow/Graduate instructor

Spring 2016

College of General Studies, University of Pittsburgh, Pittsburgh, PA

Introduction to Physical Anthropology (ANTH 0680)

Duties: Fully responsible for the course; created and led lectures, constructed and grade exams and quizzes, and worked office hours.

Teaching Assistant

Spring and Fall 2015; Fall 2016-Spring 2018

Department of Anthropology, University of Pittsburgh, Pittsburgh, PA

Human Origins (ANTH 1603; Spring 2018)

Duties: Instructed students in writing anatomical descriptions of hominid fossils; prepared lab materials; assisted in leading seminars; created inventories for primate and hominid fossil casts

Introduction to Human Evolution (ANTH 0681) and Introduction to Physical Anthropology (ANTH 0680) (2015, Fall 2016 to Fall 2017)

Duties: Led recitations (four recitations a week; 20 to 25 students/recitation), created and graded exams, and worked office hours

PUBLICATIONS

Zhang, C., Porto, A., Rolfe, S., Kocatulum, A., & Maga, A. M. (2022). Automated Landmarking via Multiple Templates. *bioRxiv* (DOI: https://doi.org/10.1101/2022.01.04.474967) (also submitted to *Methods in Ecology and Evolution* for peer review)

Zhang, C., Miller, S. F., Roosenboom, J., Wehby, G. L., Moreno Uribe, L. M., Hecht, J. T., ... & Weinberg, S. M. (corresponding author) (2018).

Soft tissue nasal asymmetry as an indicator of orofacial cleft predisposition. *American Journal of Medical Genetics Part A*, 176(6), 1296-1303 (DOI: 10.1002/ajmg.a.38688).

Schwartz, J. H., Tattersall, I., & Zhang, C. (2014).

Comment on "A complete skull from Dmanisi, Georgia, and the evolutionary biology of early *Homo*", *Science*, 344(6182), 360 (DOI: 10.1126/science.1250056).

SOFTWARE DEVELOPMENT

SlicerMorph extension developer. Participating in the development and maintenance of the open-source SlicerMorph extension for 3D biological data acquiring, processing, statistical shape analysis, and visualization based on the 3D Slicer software.

Multi-templates selection tool for automated landmarking. Created a GUI tool for the MALPACA automatic landmarking module of SlicerMorph. Github repository for the development version: https://github.com/chz31/SlicerMorph.

SlicerMorphR R package. A package for loading 3D Slicer and SlicerMorph landmark files into R. Github repository: https://github.com/SlicerMorph/SlicerMorphR.

GE tome micro-CT scanner file importing module. A module for importing volume files acquired by the GE tome micro-CT scanner into 3D Slicer for imaging analysis. **Github repository**: https://github.com/chz31/VolImportModule.

CONFERENCE TALKS

Zhang, C. (presenter) Porto, A., Rolfe, S., Kocatulum, A., & Maga, A. M. (June 27, 2022). Automated Landmarking via Multiple Templates. Symposium "Making decisions about data and analyses in systematic biology". The Evolution meeting at Cleveland, OH, June 24-28, 2022.

CONFERENCE POSTER PRESENTATIONS

Zhang, C. (presenter) Porto, A., Rolfe, S., Kocatulum, A., & Maga, A. M. (June 27, 2022). An unbiased approach selecting multiple templates for automated landmarking. The Evolution meeting at Cleveland, OH, June 24-28, 2022.

Zhang, C. (April 12, 2021)

A reassessment of the variability of *Homo erectus*: the case of analyzing different cranial regions. The 90th Annual meeting of the American Association of Physical (Biological) Anthropologists, April 7-28, 2021.

Zhang, C. (April 17, 2020)

The effect of Procrustes superimposition on the quantification of hominin cranial morphology. The 89th Annual meeting of the American Association of Physical (Biological) Anthropologists, April 15-18, 2020.

Zhang, C, Miller, S. F., Roosenboom, J., Wehby, G. L., Moreno Uribe, L. M., Hecht, J. T., ... & Weinberg, S. M. (Apr. 11, 2018).

Nasal Asymmetry as a potential risk marker for non-syndromic cleft lip with or without palate. American Cleft Palate-Craniofacial Association Annual Meeting, April 10-14, 2017, Pittsburgh, PA.

Zhang, C, Miller, S. F., Roosenboom, J., Marazita, M., Weinberg, S. M. (Nov. 4, 2017). Nasal Asymmetry as a potential risk marker for non-syndromic cleft lip with or without palate. American Association of Anatomists Regional Meeting, November 4, 2017, Pittsburgh, PA.

WORKSHOP, COMMUNITY SERVICES AND OUTREACH

The program committee volunteer member of the 2023 American Association of Biological Anthropologists Annual Meeting, April 19-22, Reno, NV.

Duties: participate in reviewing abstracts, symposium

SlicerMorph workshop instructor.

May 25-29, 2022

Duties: participating in instructing and leading the SlicerMorph workshop about using SlicerMorph and 3D Slicer tools for segmentation, landmark collection, morphometric analysis, visualization, and automated landmarking.

Website Maintenance Volunteer

Fall 2013-Spring 2015

University of Pittsburgh, Pittsburgh, PA

Duties: Responsible for maintaining the website of the Department of Anthropology

Laboratory Demonstrator

Spring 2013

University of Pittsburgh, Pittsburgh, PA

Duties: Demonstrated the Physical Anthropology Lab to local participants of the Allegheny Intermediate Unit Program

SCHOLARSHIPS

China Studies Full Tuition Remission Scholarship

Fall 2013-Spring 2015

Asian Studies Center, University of Pittsburgh

Partial Tuition Remission Scholarship

Spring 2013

Asian Studies Center, University of Pittsburgh

FIELDWORK EXPERIENCE

Archaeological Site of Atapuerca

July 2014

Atapuerca Project, Museo de la Evolución Humana, Burgos, Juan de Castilla y Leon, Spain Duties: Participated in excavation and data recording at the cave site El portalón

Dmanisi Paleoanthropology Field School

July-August 2013

Dmanisi Field School, Georgia National Museum, Republic of Georgia Duties: Participated in excavation and data recording