

# 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>) (under 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](https://doi.org/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](https://doi.org/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