# Cheng LIU (刘成)

## Education

2019-2025	Ph.D., Anthropology & Certificate in Mind, Brain, and Culture, Emory University
2019-2022	M.A., Anthropology, Emory University
2016-2019	Master student, The Asian Sphere: Trans Cultural Flows Special Program, <b>The Hebrew University of Jerusalem &amp; University of Haifa</b>
2016-2019	M.A., Archaeology, University of Haifa
2013-2014	Exchange student, Shandong University
2012-2016	B.A., Archaeology, <b>Wuhan University</b>
	Academic Appointments
2024	Global Fellow, Senckenberg Centre for Human Evolution and Palaeoenvironment, <b>Eberhard Karls University of Tübingen &amp; Leibniz Association</b>
2023	JSPS International Research Fellow, The University Museum, <b>University of Tokyo</b>
	Fellowships, Grants, & Awards
	External Sources
2025	William S. Pollitzer Student Travel Award, American Association of Biological Anthropologists
2024	IEEE CIS Conference Participation and Travel Grant, IEEE Computational Intelligence Society
2024	Global Fellowship, Senckenberg Society for Nature Research
2023	H. Russell Bernard Graduate Student Paper Prize, Society for Anthropological Sciences
2023	Student Diversity Travel Grant, Archaeology Division of the American Anthropological Association
2023	Andrew Sherratt Fund, University of Sheffield
2023-2024	Owen Aldis Award, International Society for Human Ethology
2023	International Fellowship for Research in Japan (Short-term), Japan Society for the Promotion of Science
2022-2023	Research Grant, The Leakey Foundation
2022	HRAF Summer Institute Fellowship, National Science Foundation
2021	Diverse Intelligence Summer Institute Fellowship, Templeton World Charity Foundation
2017	Chinese Student Scholarship, Israel-China Friendship Society
	Internal Sources
2024-2025	SIRE Fellowship for Graduate Students in the Humanities and Social Sciences, Emory University
2024	LGS Outstanding Scholarly Research Award, Emory University
2024	Pedagogy Mini-grant, Emory University
2023-2024	Graduate Community of Digital Scholars Fellowship, Emory University
2023	Laney Graduate Student Council Travel Grant, Emory University
2022-2025	CMBC Graduate Certificate Program Grants, Emory University
2022-2024	Professional Development Support Funds, Emory University
2021	The Halle Institute Graduate Global Research Fellowship, Emory University

- 2019-2024 George W. Woodruff Fellowship, Emory University
  - 2018 M.A. Scholarship for Excellence in Studies, University of Haifa
  - 2018 M.A. Conference Participation Grant, University of Haifa
- 2016-2018 M.A. Scholarship, The Asian Sphere Program
- 2016-2019 Research Encouragement Scholarship, University of Haifa

## **Publications**

Note: \*Correspondence, Student mentees

## **Peer-reviewed Articles**

- [13] Kilgore, M. B., Liu, C., & Stout, D. What can lithics tell us about the evolution of learning and development?. *Archaeometry*. doi: 10.1111/arcm.70002.
- [12] Liu, C.\* Variation matters: Expanding the scope of experimental archaeology. *Advances in Archaeological Practice*, 12(4), 375-389.
- [11] Liu, C.\*, Yan, X., Zhang, Z., Ding, C., Zhao, T., Jannati, S., Martinez, C., & Stout, D. Human Stone Toolmaking Action Grammar (HSTAG): A Challenging Benchmark for Fine-grained Motor Behavior Recognition. 2024 IEEE 11th International Conference on Data Science and Advanced Analytics (DSAA). doi: 10.1109/DSAA61799.2024.10722814.
- [10] Liu, C.\*, Kreisheh, N., Stout, D., & Pargeter, J. Differential effects of knapping skill acquisition on the cultural reproduction of Late Acheulean handaxe morphology: Archaeological and experimental insights. *Journal of Archaeological Science: Reports*, 49, 103974.
- [9] Wilson, E., Stout, D., **Liu, C.**, Kilgore, M. B., & Pargeter, J. Skill and core uniformity: An experiment with Oldowan-like flaking systems. *Lithic Technology*, 48(4), 333-346.
- [8] Pargeter, J., Liu, C., Kilgore, M. B., Majoe, A., & Stout, D. Testing the effect of learning conditions and individual motor/cognitive differences on knapping skill acquisition. *Journal of Archaeological Method and Theory*, 30, 127-171.
- [7] Liu, C.\*, & Stout, D. Inferring cultural reproduction from lithic data: A critical review. *Evolutionary Anthropology: Issues, News, and Reviews*, 32, 83-99.
- 2021 **[6] Liu, C.\*** A cathedral with disconnected chapels? Reassessing the cognitive capacities of Neanderthals in light of recent archaeological discoveries. *Journal of Cognition and Culture*, 21(3-4), 243-260.
- [5] Rosenberg, D., Pinsky, S., Shooval, T., Tzin, B., Reshef, H., Liu, C., Ktalav, I., & Chasan, R. Lost and found: 66B, a Late Chalcolithic site in the northern Negev, Israel and its material culture. *Mitekufat Haeven: Journal of the Israel Prehistoric Society*, 50, 104-137.
- 2020 [4] Liu, C.\*, Shimelmitz, R., Friesem, D., Yeshurun, R., & Nadel, D. Diachronic trends in occupation intensity of the Epipaleolithic site of Neve David (Mount Carmel, Israel): A lithic perspective. *Journal of Anthropological Archaeology*, 60, 101223.
- 2020 [3] Groman-Yaroslavski, I., Chen, H., Liu, C., Shimelmitz, R., Yeshurun, R., Liu, J., Yang, X., & Nadel, D. Versatile use of microliths as a technological advantage in the miniaturization of Late Pleistocene toolkits: The case study of Neve David, Israel. *PLoS ONE*, 15(6), e0233340.
- [2] Shimelmitz, R., Liu, C., Seymore, M., Gershtein, E. C., Gershtein, K. C., Katina, A., Shtober-Zisu, N., & Nadel, D. Nahal Shelef: A Holocene quarry and workshop site in the Menashe Hills, Israel. Mitekufat Haeven: Journal of the Israel Prehistoric Society, 49, 137-151.
- 2015 [1] He, Y., Jin, G., Zhang, B., **Liu, C.**, Xu, S., Chen, S., Yi, H., & Jiang, F. Investigation on the modern environment and resources at Bianbiandong site (扁扁洞遗址现代环境与资源调查报告). *Eastern Archaeology* (东方考古), 12, 361-368. (In Chinese with English abstract)

## **Editor-reviewed Articles**

2025 [2] Liu, C.\*, & Stout, D. Beyond the binary: Inferential challenges and solutions in cognitive archaeology. *Behavioral and Brain Sciences.* 48, e13.

2024 [1] Nishiaki, Y., & Liu, C. An interview with Professor Yoshihiro Nishiaki (西秋良宏教授访谈录). Cultural Relics in Southern China (南方文物). 143, 34-43. (In Chinese with English abstract)

#### **Translations**

[1] Erdmann, K. D. Toward a global community of historians: The International Historical Congresses and the International Committee of Historical Sciences 1898-2000 (国际历史科学大会百年历程: 1898-2000). Chapter 11, 16 translated by Liu, C., pp. 201-223 & 334-348. Beijing: China Social Science Press. (In Chinese)

### **Theses**

- [3] Liu, C. Homo faber in the making: Towards an interdisciplinary understanding of human toolmaking skill acquisition. Ph.D. Thesis, Emory University, USA. Committee members: Dietrich Stout (Chair), Craig Hadley, John Patty, and Sileshi Semaw.
- 2019 [2] Liu, C. From lithic production to settlement dynamics: The case study of Neve David, a Middle Epipaleolithic site at Mt. Carmel, Israel. M.A. Thesis, University of Haifa, Israel. Advisors: Dani Nadel and Ron Shimelmitz.
- [1] Liu, C. A preliminary study on the mobility of hunter-gatherers in South China during the Pleistocene-Holocene transition. B.A. Thesis, Wuhan University, China. Advisor: Yinghua Li (In Chinese)

## **Scholarly Presentations**

### **Invited Talks**

- [5] Liu, C. "*Homo faber* in the making: Ethnographic and experimental insights into human toolmaking skill acquisition." Center for Archaeological Science, Sichuan University, China, December 3.
- 2024 **[4] Liu, C.** "Toolmaking skill acquisition in non-industrial societies: A cross-cultural perspective." Institute of Culture and Heritage, Northwestern Polytechnical University, China, November 28. (Virtual)
- [3] Liu, C. "How do people in non-industrial societies learn to make tools?" Kolloquium Ältere Urgeschichte, Department of Early Prehistory and Quaternary Ecology, Eberhard Karls University of Tübingen, July 4.
- [2] Liu, C. "Investigating biases in the cultural reproduction of lithic technologies: From Oldowan to Acheulean." The University Museum, University of Tokyo, May 10.
- [1] Liu, C. "Inferring cultural reproduction from stone artifacts: Theoretical reflections and experimental insights." Nagoya University Museum, Nagoya University, April 27.

#### **Conference Presentations**

- 2025 [8] Liu, C. Towards a computational ethology of stone toolmaking: Preliminary insights from HSTAG.

  The 94th Annual Meeting of the American Association of Biological Anthropologists, Baltimore, MD, USA
  (Poster)
- 2024 [7] Liu, C., Yan, X., Zhang, Z., Ding, C., Zhao, T., Jannati, S., Martinez, C., & Stout, D. Human Stone Toolmaking Action Grammar (HSTAG): A Challenging Benchmark for Fine-grained Motor Behavior Recognition. The 11th IEEE International Conference on Data Science and Advanced Analytics, San Diego, CA, USA (Podium)
- 2023 **[6] Liu, C.** "A cross-cultural analysis of toolmaking skill acquisition in non-industrial societies." *The 2023 AAA/CASCA Annual Meeting*, Toronto, Canada. (**Podium**)
- [5] Liu, C., Kreisheh, N., Stout, D., & Pargeter, J. "Detecting skill level and mental template in Late Acheulean biface morphology: Archaeological and experimental insights." *Society for American Archaeology 88th Annual Meeting*, Portland, OR, USA. (**Podium**)
- [4] Liu, C., Rogers, M., & Semaw, S. "A first look at the LSA lithic assemblage of KLT-1 (Gona, Ethiopia)." *Paleoanthropology Society 2022 Annual Meeting*, Denver, CO, USA. (Poster)

- 2018 **[3] Liu, C.**, Shimelmitz, R., Yeshurun, R., & Nadel, D. "Reconstructing settlement dynamics in the Geometric Kebaran site of Neve David: A lithic perspective." *Israel Prehistoric Society 2018 Annual Conference*, Jerusalem. **(Podium)**
- 2018 [2] Liu, C., Shimelmitz, R., Yeshurun, R., & Nadel, D. "Diachronic trends in occupation intensity of the Epipaleolithic site of Neve David (Mount Carmel, Israel)." XVIIIe Congrès de l'UISPP, Paris, France. (Poster)
- 2018 [1] Liu, C. "No man is an island: Reconstructing the population dynamics and maritime connectivity of Cyprus during the Pleistocene-Holocene transition." *CROSSDEM 2018: Cross-Disciplinary Approaches to Prehistoric Demography*, Tarragona, Spain. (Podium)

## Field/Research Experience

- 2023 **Sefunim**, Middle Paleolithic-Epipaleolithic, Israel (Lithic analysis)
- 2021 Gona (KLT-1M), Later Stone Age, Ethiopia (Lithic analysis)
- 2017-2018 **Skhul Terrace**, Middle Paleolithic, Israel (Excavation)
  - 2017 **Tel Tsaf**, Chalcolithic, Israel (Excavation)
  - 2017 **Tabun Cave**, Lower-Middle Paleolithic, Israel (Excavation)
  - 2017 **el-Wad Terrace**, Epipaleolithic, Israel (Excavation)
  - 2017 **66B**, Chalcolithic, Israel (Lithic analysis)
- 2016-2018 **Neve David**, Epipaleolithic-Neolithic, Israel (Excavation; Lithic analysis)
- 2016-2017 **Nahal Shelef**, Neolithic-Chalcolithic, Israel (Survey; Lithic analysis)
  - 2016 Shibei Han Tombs (狮北汉墓), 2nd century BC-3rd century AD, China (Artifact accessioning)
  - 2015 Wulanmulun Loc. 2 (乌兰木伦第二地点), Middle Paleolithic, China (Excavation)
- 2014-2015 **Taijiasi** (台家寺), Bronze Age, China (Excavation)
  - 2014 Nanchengzi (南城孜), Neolithic, China (Artifact refitting and accessioning)
  - 2014 **Bianbiandong** (扁扁洞), Early Neolithic, China (Ethnoarchaeological survey)
  - 2014 **Zhoujiadian Lock** (周家店闸), 14th-20th centuries, China (Survey)
  - 2013 **Weitouhe Kiln Site** (渭头河窑址), 19th-20th centuries, China (Survey)
  - 2013 **Xujiacun** (徐家村), 18th-20th centuries, China (Survey)
  - 2013 **Tuojiazhou** (庹家洲), Neolithic, China (Artifact accessioning)

# Teaching Experience

## **Emory University**

Spring 2025	IDS 220RW: What Does it Mean to be Human? Co-instructor of Record
Spring 2025	SIRE 299R: SIRE Research Partner Program, Instructor of Record
Fall 2024	SIRE 299R: SIRE Research Partner Program, Instructor of Record
Spring 2024	ANT 204: Introduction to Archaeology, Instructor of Record

- Spring 2023 ANT 304W: Paleolithic Archaeology, Guest Lecturer
- Fall 2021 ANT 204: Introduction to Archaeology, Guest Lecturer
- Spring 2021 ANT 285: Concepts and Methods in Biological Anthropology, Teaching Assistant (Virtual)
  - Fall 2020 ANT 204: Introduction to Archaeology, Teaching Assistant (Virtual)
- Spring 2020 ANT 385: Foraging to Food Production, Guest Lecturer
- Spring 2020 ANT/BIOL 315: Ancient DNA and Human Evolution, Teaching Assistant

# **Institutional Service**

	Emory University
2023-2024	Honorary Degrees Committee, University Senate
2021-2022	Teaching Roundtable Committee, Department of Anthropology
2020-2021	Colloquium Committee, Department of Anthropology
	Professional Service
	Editorial Work
2025-	Copyeditor, Bulletin of the History of Archaeology
	Manuscript Referee
2021-	Mitekufat Haeven: Journal of the Israel Prehistoric Society $\cdot$ Philosophical Transactions of the Royal Society B: Biological Sciences $\cdot$ Peer Community In Archaeology $\cdot$ Lithic Technology $(\times 2)$ $\cdot$ Evolutionary Anthropology: Issues, News, and Reviews $(\times 2)$ $\cdot$ American Antiquity
	Conference Organization
2023	Chair, Symposium "Experiential learning, experimental archaeologies", SAA 2023, Portland, OR, USA
	Professional Memberships
2024-	International Society for Human Ethology
2024-	American Association of Biological Anthropologists
2024-	IEEE Computational Intelligence Society
2023-	Society for Anthropological Sciences
2023-	American Anthropological Association
2022-	Society for American Archaeology
2022-	Paleoanthropology Society
2018-	International Union of Prehistoric and Protohistoric Sciences
2016-	Israel Prehistoric Society
	Additional Training
2025	Computational Neuroscience Course, Neuromatch Academy (Virtual)
2022	HRAF Summer Institute for Cross-Cultural Anthropological Research, Yale University
2021	Applied Point Pattern Analysis in Archaeology Summer School, University of Kiel (Virtual)
2021	Empowering Interdisciplinary Teaching and Scholarship Graduate Workshop, Emory University (Virtual)
2020	CommSciPaleo 2020 (Science Communication in Paleoanthropology), Perot Museum of Nature and Science
2019	Certification for Human Subject Research (Social/Behavioral Focus), Collaborative Institutional Training Initiative [Expiry date: 12/29/2025]
2018	International Winter School of Agent-based Modeling of Social-ecological System, Arizona State University
2015	JLU-SFU Human Osteoarcheology Summer School, Jilin University/Simon Fraser University
2015	Archaeological ArcGIS Workshop, Gansu Provincial Institute of Archaeology/Harvard University

# **Public Outreach**

Tabletop outreach, Perot Museum of Nature and Science, Dallas, TX, USA

2012-2013 Museum docent, Changsha Jiandu Museum, Changsha, China

# Media Coverage

2020 How did ancient people in the Carmel cut their steaks 20,000 years ago? The Jerusalem Post

# **Relevant Skills**

## Software

LATEX, Git, ArcGIS Pro, Artec Studio, AutoCAD, Photoshop

## **Programming Languages**

Proficient in: R

Familiar with: NetLogo, Python

## **Natural Languages**

Mandarin/Hunanese (native), English (fluent), French (basic competence in reading)