

# Curriculum Vitae

## Dietrich William Stout

12 September 2023

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### **Contact Information**

Dietrich Stout  
Department of Anthropology  
Emory University  
1557 Dickey Drive  
Atlanta, GA 30322  
[dwstout@emory.edu](mailto:dwstout@emory.edu)  
<https://scholarblogs.emory.edu/stoutlab/>  
404-712-1828

### **Current Positions**

Professor, *Department of Anthropology, Emory University*  
Director, *Emory University Center for Mind, Brain, and Culture*  
Program Director, *Graduate Certificate in Mind, Brain, and Culture*

### **Professional Experience**

#### ***Previous Positions:***

Lecturer (equiv. US Asst. Prof.), 2005-2009  
University College London  
London, UK

Visiting Assistant Professor of Anthropology, 2004 -2005  
The George Washington University  
Washington D.C.

Research Associate, 2004 – 2006  
Stone Age Institute and  
Center for Research into the Anthropological Foundations of Technology (CRAFT)  
Indiana University, Bloomington

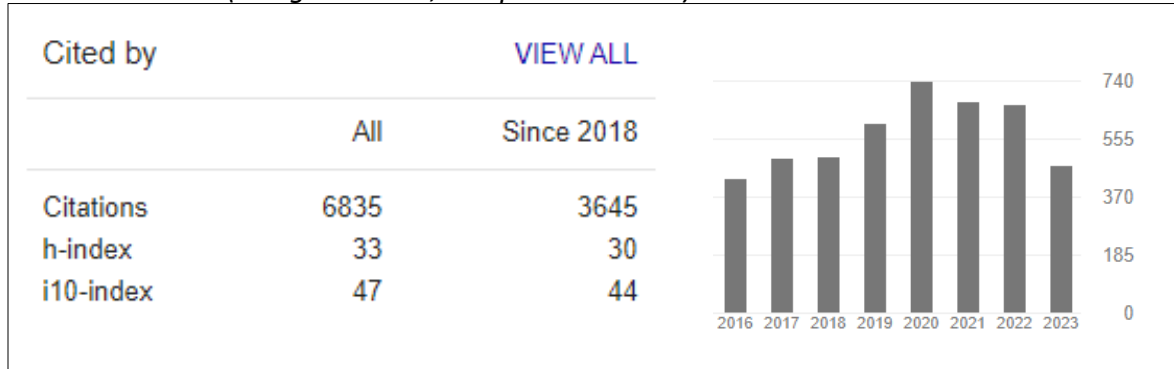
### **Education**

#### ***Degrees:***

Indiana University, Bloomington, IN	Major: Paleoanthropology Minors: Psychology, Bioanthropology	Ph.D., 2003
James Madison University, Harrisonburg, VA	Major: Anthropology	B.Sc., 1994

## Research

### *Citation Metrics (Google Scholar, 9 September 2023)*



### **Publications**

\*postdoctoral co-author, \*\*student co-author (status at time of work)

For publications since 2015, my contributions are listed using the 14 item [CRediT](#) taxonomy.

#### Peer-Reviewed Journals

Arbib, M. A., Fragaszy, D. M., Healy, S. D., & **Stout, D.** (2023). Tooling and Construction: From Nut-Cracking and Stone-Tool Making to Bird Nests and Language. *Current Research in Behavioral Sciences*, 5, 100121.

*CRediT: Writing – original draft*

Liu, C\*\*, Khreisheh, N.\*, **Stout, D.**, & Pargeter, J.\* (2023). 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.

*CRediT: Conceptualization, Funding acquisition, Methodology, Project administration, Writing – original draft*

Hecht, E. E., Pargeter, J.\*, Khreisheh, N.\*, & **Stout, D.** (2023). Neuroplasticity enables bio-cultural feedback in Paleolithic stone-tool making. *Scientific Reports*, 13(1), 2877.

*CRediT: Conceptualization, Funding acquisition, Investigation, Methodology, Project administration, Writing – original draft*

Pargeter, J., Liu, C\*\*, Kilgore, M. B\*\*, Majoe, A., & **Stout, D.** (2023). Testing the Effect of Learning Conditions and Individual Motor/Cognitive Differences on Knapping Skill Acquisition. *Journal of Archaeological Method and Theory*, 30(1), 127-171.

*CRediT: Conceptualization, Funding acquisition, Investigation, Methodology, Project administration, Writing – original draft*

Wilson, E. P., **Stout, D.**, Liu, C\*\*, Kilgore, M. B., & Pargeter, J. (2023). Skill and Core Uniformity: An Experiment with Oldowan-like Flaking Systems. *Lithic Technology*, 1-14.

*CRediT: Conceptualization, Funding acquisition, Investigation, Methodology, Project administration, Writing – original draft*

Liu, C., & Stout, D. (2022). Inferring cultural reproduction from lithic data: A critical review. *Evolutionary Anthropology: Issues, News, and Reviews*, 32(2), 83-99.

*CRedit: Writing – original draft*

Mangalam, M., Frigaszy, D. M., Wagman, J. B., Day, B. M., Kelty-Stephen, D. G., Bongers, R. M., **Stout, D.**, & Osiurak, F. (2022). On the psychological origins of tool use. *Neuroscience & Biobehavioral Reviews*, 134, 104521.

*CRedit: Writing – original draft*

Bayani, K. Y. T.\*\*\*, Natraj, N.\*\*\*, Khreisheh, N.\*, Pargeter, J.\*, **Stout, D.**, Wheaton, L.A. (2021) Perceptuomotor relationships during paleolithic stone toolmaking learning: intersections of observation and practice during technological skill development. *Communications Biology*, 4(1): 1278

*CRedit: Conceptualization, Funding acquisition, Methodology, Project administration, Writing – original draft*

**Stout, D.** (2021). The Cognitive Science of Technology. *Trends in Cognitive Sciences*, 25(11), 964-977. doi: 10.1016/j.tics.2021.07.005

*CRedit: Conceptualization, Writing – original draft*

**Stout, D.**, Chaminade, T., Apel, J., Shafti, A., & Faisal, A. A. (2021). The measurement, evolution, and neural representation of action grammars of human behavior. *Scientific Reports*, 11(1), 1-13.

*CRedit: Conceptualization, Data curation, Funding acquisition, Investigation, Methodology, Project administration, Writing – original draft*

Pargeter, J.\*, Khreisheh, N.\*, John Shea, **Stout, D.** (2020) Knowledge vs. Know-how? Dissecting the foundations of stone knapping skill. *Journal of Human Evolution* 145, 102807.

*CRedit: Conceptualization, Data curation, Formal analysis, Funding acquisition, Investigation, Methodology, Project administration, Writing – original draft*

Semaw, S., M. J. Rogers, S. W. Simpson, N. E. Levin, J. Quade, N. Dunbar, W. C. McIntosh, I. Cáceres, G. E. Stinchcomb, R. L. Holloway, F. H. Brown, R. F. Butler, **D. Stout**, and M. Everett (2020). Co-occurrence of Acheulian and Oldowan artifacts with *Homo erectus* cranial fossils from Gona, Afar, Ethiopia. *Science Advances*, 6(10), eaaw4694. doi:10.1126/sciadv.aaw4694

*CRedit: Investigation*

Pargeter, J.\*, Khreisheh, N.\*, **Stout, D.** (2019) Understanding stone tool-making skill acquisition: experimental methods and evolutionary implications. *Journal of Human Evolution*. 133, 146-166.

**Stout, D.**, Rogers, M.J., Jaeggi, A.V., Semaw, S. (2019) Archaeology and the origins of human cumulative culture: a case study from the earliest Oldowan at Gona, Ethiopia. *Current Anthropology*.60(3).

*CRedit: Conceptualization, Data curation, Formal analysis, Investigation, Methodology, Writing – original draft*

**Stout, D.** (2018). Archaeology and the evolutionary neuroscience of language: The technological pedagogy hypothesis. *Interaction Studies*, 19(1-2), 256-271

*CRedit: Writing – original draft*

Arbib, M. A., F. Aboitiz, J. M. Burkart, M. Corballis, G. Coudé, E. Hecht, K. Liebal, M. Myowa-Yamakoshi, J. Pustejovsky, S. Putt, F. Rossano, A. E. Russon, P. T. Schoenemann, U. Seifert, K. Semendeferi, C. Sinha, **D. Stout**, V. Volterra, S. Waciewicz and B. Wilson (2018). "The comparative neuroprimatology 2018 (CNP-2018) road map for research on How the Brain Got Language." *Interaction Studies* 19(1-2): 370-387.

*CRedit: Writing – review & editing*

- Stout, D.**, Hecht, E.E. (2017) The evolutionary neuroscience of cumulative culture. *Proceedings of the National Academy of Sciences (US)*. 114(30), 7861-7868.  
*CRedit: Writing – original draft*
- Stout, D.**, & Khreisheh, N.\* (2015). Skill Learning and Human Brain Evolution: An Experimental Approach. *Cambridge Archaeological Journal*, 25(04), 867-875.  
*CRedit: Conceptualization, Data curation, Formal analysis, Funding acquisition, Investigation, Methodology, Project administration, Writing – original draft*
- Stout, D.**, Hecht, E.E.\*, Khreisheh, N.\*, Bradley, B., Chaminade, T. (2015) Cognitive demands of Lower Paleolithic toolmaking. *PLoS ONE*. 10(4): e0121804. doi:10.1371/journal.pone.0121804  
*CRedit: Conceptualization, Data curation, Formal analysis, Funding acquisition, Investigation, Methodology, Project administration, Writing – original draft*
- Hecht, E.E.\*, Gutman, D.A., Bradley, B.A., Preuss, T.M., **Stout, D.** (2015) Virtual dissection and comparative connectivity of the superior longitudinal fasciculus in chimpanzees and humans. *NeuroImage*. 108, 124-137.  
*CRedit: Conceptualization, Writing – original draft*
- Hecht E.E.\*, Gutman D.A., Khreisheh N., Taylor S.V., Kilner J., Faisal A.A., Bradley B.A., Chaminade T., **Stout, D.** (2015) Acquisition of Paleolithic toolmaking abilities involves structural remodeling to inferior frontoparietal regions. *Brain Structure and Function*: 1-17.  
*CRedit: Conceptualization, Data curation, Formal analysis, Funding acquisition, Investigation, Methodology, Project administration, Writing – original draft*
- Stout, D.**, Apel, J., Commander, J.\*\*\*, Roberts, M. (2014) Late Acheulean technology and cognition at Boxgrove, UK. *Journal of Archaeological Science*.41: 576-590.
- Hecht E.E.\*, Muphy L.E., Gutman D.A., Votaw, J.R., Schuster, D.M., Preuss, T.M., Orban, G.A., **Stout, D.**, Parr, L.A. (2013) Differences in Neural Activation for Object-Directed Grasping in Chimpanzees and Humans. *The Journal of Neuroscience*. 33(35): 14117-14134.
- Stout, D.**, Chaminade, T. (2012) Stone tools, language and the brain in human evolution. *Philosophical Transactions of the Royal Society of London B*, 367, 75-87.
- Kristian J. Carlson, **Dietrich Stout**, Tea Jashashvili, Darryl J. de Ruiter, Paul Tafforeau, Keely Carlson, Lee R. Berger. (2011) The endocast of MH 1, *Australopithecus sediba*. *Science*. 333(6048): 1402-1407
- Stout, D.**, Passingham, R., Frith, C., Apel, J., Chaminade, T. (2011) Technology, expertise, and social cognition in human evolution. *European Journal of Neuroscience*. 33: 1328-1338
- Stout, D.** (2011) Stone toolmaking and the evolution of human culture and cognition. *Philosophical Transactions of the Royal Society of London B*, 366, 1050-1059
- Faisal, A., **Stout, D.**, Apel, J, Bradley, B. (2010) The manipulative complexity of Lower Paleolithic stone tool-making. *PLoS ONE* 5(11): e13718. doi:10.1371/journal.pone.0013718 (cited by 46)
- Stout, D.**, Semaw, S., Rogers, M., Cauche, D. (2010) Technological variation in the earliest Oldowan from Gona, Afar, Ethiopia. *Journal of Human Evolution*. 58(6):474-91.
- Stout, D.** (2010) The evolution of cognitive control. *Topics in Cognitive Science*. 2(4): 614-630.

- Stout, D.** & Chaminade, T. (2009) Making tools and making sense: complex intentional behaviour in human evolution. *Cambridge Archaeological Journal*. 19(1) 85-96.
- Stout, D.** (2008) Technology and human brain evolution. *General Anthropology*.15(2): 1-5.
- Stout, D.,** Toth, N., Schick, K. D. & Chaminade, T. (2008) Neural correlates of Early Stone Age tool-making: technology, language and cognition in human evolution. *Philosophical Transactions of the Royal Society of London B*, 363:1939-1949
- Stout, D.,** Chaminade, T. (2007) The evolutionary neuroscience of tool making. *Neuropsychologia*. 45, 1091-1100.
- Stout, D.,** Quade, J., Semaw, S., Rogers, M., Levin, N. (2005) Raw material selectivity of the earliest stone toolmakers at Gona, Afar, Ethiopia. *Journal of Human Evolution* 48 (4): 365-380.
- Quade, J., Levin, N., Semaw, S., **Stout, D.,** Renne, P., Rogers, M., Simpson, S. (2004) Paleoenvironments of the earliest stone toolmakers, Gona, Ethiopia. *Geological Society of America Bulletin* 116 (11/12): 1529-1544.
- Semaw, S., Rogers, M., Quade, J., Renne, P., Butler, R., Dominguez-Rodrigo, M., **Stout, D.,** Hart, W., Pickering, T., Simpson, S. (2003) 2.6-Million-year-old stone tools and associated bones from OGS-6 and OGS-7, Gona, Afar, Ethiopia. *Journal of Human Evolution* 45 (2): 169-177.
- Stout, D.** (2002) Skill and cognition in stone tool production: An ethnographic case study from Irian Jaya. *Current Anthropology* 45 (3): 693-722.
- Stout, D.,** Toth, N., Schick, K., Stout, J.C., Hutchins, G. (2000) Stone tool-making and brain activation: Positron Emission Tomography (PET) studies. *Journal of Archaeological Science* 27: 1215-1223

Other Periodicals:

- Stout, D.** (2016) Tales of a Stone Age neuroscientist. *Scientific American* 314 (4): 28-35. (reprinted in a special collector's edition, *The Story of Us*, Autumn 2016).  
*CRedit: Writing – original draft*

Peer-Reviewed Edited Volumes:

- Stout, D.,** & Hecht, E. (2023). The Evolutionary Neuroscience of Cultural Evolution. In J. J. Tehrani, J. Kendal & R. Kendal (Eds.), *The Oxford Handbook of Cultural Evolution* (pp. 0): Oxford University Press.  
*CRedit: Writing – original draft*
- Stout, D.** (2023). Chapter 9 - Experimental neuroarchaeology of visuospatial behavior. In E. Bruner (Ed.), *Cognitive Archaeology, Body Cognition, and the Evolution of Visuospatial Perception* (pp. 195-211): Academic Press.  
*CRedit: Writing – original draft*
- Stout, D.,** & Hecht, E. (2023). Evolutionary Neuroarchaeology. In T. Wynn, K. A. Overmann, & F. L. Coolidge (Eds.), *The Oxford Handbook of Cognitive Archaeology* (pp. C14.S11-C14.S11). Oxford University Press.  
*CRedit: Writing – original draft*
- Stout, D.** (2019) *Homo artifex*: an extended evolutionary perspective on the origins of the human mind, brain and culture. In *Squeezing Minds from Stones: Cognitive Archaeology and the Evolution*

*of the Human Mind* (ed. Frederick L. Coolidge and Karenleigh A. Overmann) Oxford University Press.

*CRedit: Writing – original draft*

Semaw S, Rogers MJ, Cáceres I, **Stout D**, Leiss AC. 2018. The Early Acheulean~ 1.6–1.2 Ma from Gona, Ethiopia: Issues related to the Emergence of the Acheulean in Africa. In *The Emergence of the Acheulean in East Africa and Beyond*, pp. 115-28: Springer

*CRedit: Writing – original draft*

**Stout, D.** (2018) Human brain evolution: history or science? In *Rethinking Human Evolution* (ed. Jeffrey Schwartz) Konrad Lorenz Institute, Vienna Series in Theoretical Biology: MIT Press. pp. 297-318.

*CRedit: Writing – original draft*

**Stout, D.**, Hecht, E.E.\* (2015) Neuroarchaeology. In *Human Paleoneurology* (ed. Emiliano Bruner) Springer Series in Bioinformatics, vol. 3, N. Kasabov, series ed. pp. 145-175. New York: Springer

*CRedit: Writing – original draft*

Hecht, E.E.\*, **Stout, D.** (2015) Techniques for studying brain structure and function. In *Human Paleoneurology* (ed. Emiliano Bruner) Springer Series in Bioinformatics, vol. 3, N. Kasabov, series ed. pp. 209-224. New York: Springer

*CRedit: Writing – review & editing*

**Stout, D.** (2013) The neuroscience of technology. In *Cultural Evolution: society, technology, language and religion* (ed. Peter J. Richerson and Morten H. Christiansen) Strüngmann Forum Reports, vol. 11, J. Lupp, series ed. pp. 157-174. Cambridge, MA: MIT Press

Mesoudi, A., Laland, K., Boyd, R., Buchanan, B., Flynn, E., McCauley, R., Renn, J., Reyes-Garcia, V., Shennan, S., **Stout, D.**, Tennie, C. (2013) The cultural evolution of technology and science. In *Cultural Evolution: society, technology, language and religion* (ed. Peter J. Richerson and Morten H. Christiansen) Strüngmann Forum Reports, vol. 11, J. Lupp, series ed. pp. 193-218. Cambridge, MA: MIT Press

Cross, I.W., Fitch, T., Aboitiz, F., Iriki, A., Jarvis, E.D., Lewis, J., Liebal, K., Merker, B., **Stout, D.**, and Trehub, S.E. (2013) Culture and Evolution. In *Language, Music, and the Brain* (ed. Michael A. Arbib) Strüngmann Forum Reports, vol. 10, J. Lupp, series ed. pp. 541-562. Cambridge, MA: MIT Press

**Stout, D.** (2010) Possible relations between tools and language in human evolution. In *Stone tools and the evolution of human cognition*. (Ed. A. Nowell & I. Davidson), pp. 159-184. Boulder, CO: Colorado University Press.

Semaw, S., Rogers, M., & **Stout, D.** (2009). The Oldowan-Acheulian Transition: Is there a “Developed Oldowan” Artifact Tradition? In M. Camps & P. Chauhan (Eds.), *Sourcebook of Paleolithic Transitions: Methods, Theories, and Interpretations* (pp. 173-193). New York: Springer. (cited by 22)

#### Other Edited Volumes:

**Stout, D.** (2020). Culture, Mind, and Brain in Human Evolution: An Extended Evolutionary Perspective on Paleolithic Toolmaking as Embodied Practice. In L. J. Kirmayer, C. M. Worthman, S. Kitayama, R. Lemelson, & C. Cummings (Eds.), *Culture, Mind, and Brain: Emerging Concepts, Models, and Applications*. Cambridge: Cambridge University Press.

*CRedit: Writing – original draft*

Rilling, J.K., **Stout, D.** Evolution of the Neural Bases of Higher Cognitive Function in Humans. (2014)  
In Michael Gazzaniga and George R. Mangun (Eds.), *The Cognitive Neurosciences*, 5th edition, pp. 41-49. Cambridge: MIT Press

**Stout, D.**, Schick, K., Toth, N. (2009) Understanding Oldowan knapping skill: an experimental study of skill acquisition in modern humans. In *The Cutting Edge: New Approaches in the Archaeology of Human Origins* (ed. N. Toth & K. Schick). pp. 247-266. Gosport, IN: Stone Age Institute Press.

**Stout, D.** (2006) Oldowan toolmaking and hominin brain evolution: theory and research using Positron Emission Tomography (PET). In *The Oldowan: case studies into the earliest Stone Age* (ed. N. Toth & K. Schick), pp. 267-306. Gosport, IN: Stone Age Institute Press.

**Stout, D.** & Semaw, S. (2006) Knapping skill of the earliest stone toolmakers: insights from the study of modern human novices. In *The Oldowan: case studies into the earliest Stone Age* (ed. N. Toth & K. Schick). pp. 307-320. Gosport, IN: Stone Age Institute Press.

**Stout, D.**, Toth, N. & Schick, K. (2006) Acheulean toolmaking and hominin brain evolution: a pilot study using Positron Emission Tomography. In *The Oldowan: case studies into the earliest Stone Age* (ed. N. Toth & K. Schick), pp. 321-331. Gosport, IN: Stone Age Institute Press.

**Stout, D.** (2005) The social and cultural context of stone knapping skill acquisition. *Stone Knapping : the necessary conditions for a uniquely hominin behaviour*. Edited by V. Roux and B. Bril. McDonald Institute Monograph. Oxford: Oxbow Books. (Actes du workshop de Pont-à-Mousson, 21-24 novembre 2001)

**Stout, D.** (2005) Neural foundations of perception and action in stone knapping. *Stone Knapping : the necessary conditions for a uniquely hominin behaviour*. Edited by V. Roux and B. Bril. McDonald Institute Monograph. Oxford: Oxbow Books. (Actes du workshop de Pont-à-Mousson, 21-24 novembre 2001)

#### Comments and Reviews:

**Stout, D.** What is “cumulative” evolution? Comment on “Is human culture cumulative?” by Krist Vaesen and Wybo Houkes, *Current Anthropology*. 62(2), 230.

*CRedit: Writing – original draft*

**Stout, D.** (2017) Comment on “Early Stone Tools and Cultural Transmission Resetting the Null Hypothesis” by Claudio Tennie, L. S. Premo, David R. Braun, and Shannon P. McPherron. *Current Anthropology*. 58(5)

**Stout, D.** (2016) The modern era of research on language evolution: Moving forward: Comment on “Towards a computational comparative neuroprimateology: Framing the language-ready brain” by Michael A. Arbib. *Physics of Life Reviews*, 16, 99-100.

**Stout, D.** (2006) Book review: “From monkey brain to human brain: a Fyssen Foundation symposium.” *Journal of Human Evolution* 51: 111-112.

**Stout, D.** (2004) Comment on “The invention of technology” by S. de Beaune. *Current Anthropology* 45 (2): 155.

**Stout, D.** (2002) Thinking and doing in Cognitive Archaeology: Giving skill its due. *Behavioral and Brain Sciences* 25 (3): 421-422.

**Stout, D.** (2001) Constraint and adaptation in primate brain evolution. *Behavioral and Brain Sciences* 24 (2): 295-296.

### ***Grants and Funding:***

#### Current:

NSF Collaborative Research: NCS-FO (21-517)  
"Foundations of learning: individual variation, plasticity, and evolution"  
2022- 2024  
PI (with PIs at three other institutions)  
Emory Budget: \$140,343

NSF BCS Archaeology DDRI (15-554) Doctoral Dissertation Research, 2020-2022  
"Developmental and Individual Differences in Learning Stone Knapping"  
PI (as faculty advisor for Megan Beney Kilgore)  
Budget: \$16,458

Halle Institute for Global Research, 2020-2021 (delayed to 2021-2023)  
Emory University – Tel Aviv University Collaborative Research Grant: "Skilled practice, culture and cognition in the Paleolithic"  
Co-PI with Ran Barkai (TAU)  
Emory Budget: \$10,000

#### Completed:

NSF Integrative Strategies for Understanding Neural and Cognitive Systems (16-508), 2016-2020.  
"Individual variation, plasticity, and learning in human brain evolution"  
Co-Investigator (PI: Erin Hecht, Harvard)  
Total award: \$970,704  
Emory sub-contract: \$701,647

NSF Interdisciplinary Behavioral and Social Science Research (12-614), 2014-2018  
"The interrelated development of language and technology"  
PI (with 5 co-investigators)  
\$349,352

John Templeton Foundation, 2014-2016  
"*Homo faber*: The language of technology"  
PI (with 4 co-investigators)  
\$198,784

Emory University Research Committee, 2015-2016  
"The Language of Technology: Neural Substrates of Tool-making and Language"  
PI (with 1 co-investigator)  
\$33,520

Emory Conference Center Hotel Subvention Fund, 2016  
Workshop: "From tools and gestures to the language-ready brain"  
Co-organizer  
Amount: \$18,100



Leverhulme Trust Research Grant, 2010-2013  
Learning to be Human: Skill acquisition and the development of the human brain  
Co-I  
Amount: £231,237

Leakey Foundation General Research Grant, 2012  
Understanding Late Acheulean Knapping Skill and its Cognitive Implications  
PI  
Requested: \$13,825, Awarded \$9,400

Wenner-Gren Foundation Post-Ph.D. Research Grant, 2012  
Understanding Late Acheulean Knapping Skill and its Cognitive Implications  
PI  
Requested: \$11,993; Awarded \$11,993; Accepted \$4,628

Emory University Center for Systems Imaging Pilot Study Grant, 2012  
The Neural Foundations of Human Tool Use  
PI  
Amount: Waiver of imaging fees (\$12,500)

European Commission Sixth Framework Programme, 2006-9  
Hand to Mouth: A Framework for Understanding the Archaeological and Fossil Records of Human  
Cognitive Evolution  
PI (Work Package 8)  
Amount: £81,374

British Academy Small Grant, 2006-7  
Gona Palaeoanthropological Research Project, excavations at early Acheulean locality BSN17  
PI  
Amount: £1,705

CRAFT Research Grant, 2005  
Handaxe Making and Brain Activation: A Pilot Study Using Positron Emitted Tomography  
PI  
Amount: \$8,000

National Science Foundation Dissertation Enhancement Grant, 2001  
Stone Tools and the Brain: A Positron Emitted Tomographic Study.  
Amount: \$12,000

L.S.B. Leakey Foundation General Grant, 2000  
Stone Tools and the Brain: A Positron Emitted Tomographic Study.  
PI  
Amount: \$11,970

Research Grant: Centro Studi Ligabue, 1999  
Stone-Adze Makers of Langda Village, Irian Jaya, Indonesia  
PI  
Amount: \$3,000

CRAFT Research Grant, 1999  
Stone-Adze Makers of Langda Village, Irian Jaya, Indonesia  
PI

Amount: \$4,000

International Enhancement Grant 1997

Amount: \$1,000

Office of International Studies

Indiana University - Bloomington, IN

CRAFT Research Fellowships, 1998, 1999, 2000, 2001, 2002, 2003

Center for Research into the Anthropological Foundations of Technology (CRAFT)

Research Assistant, 1997

Center for Research into the Anthropological Foundations of Technology (CRAFT)

Associate Instructorship 1996 - 1998

Indiana University - Bloomington, IN

Skomp Fellow, 1995

Indiana University - Bloomington, IN

Teaching Support:

Martin-Masse Theory Practice Learning Equipment Grant, 2011

\$90

Center for Faculty Development and Excellence (CFDE) Classroom Mini Grants, 2011

\$150

***Professional Presentations***

Organized workshops and symposia:

“Minds in Movement: Prospects for the Study of Embodied Cognition, Learning, and Culture.” CMBC Workshop. Emory University. May 15-17, 2023.

“From Tools and Gestures to the Language-Ready Brain”: Emory Conference Center Hotel (April 10-12, 2016). 27 participants. Co-organized with Michael Arbib, Erin Hecht, and Todd Preuss.

“Hands, Brains, and Tools: Integrating concepts in human evolution” Invited podium symposium, 85th annual meeting of the American Association of Physical Anthropologists: Atlanta. GA (April 13 - 16, 2016)

Invited papers and workshops (selected):

**Stout, D.** “The evolution of technology.” Institute for Advanced Study in Toulouse, Toulouse School of Economics. Toulouse, France. June 27, 2023.

**Stout, D.** “Neuroarchaeology” *3rd Conference on Cortical Evolution*, Spanish Museum of Human Evolution, Burgos, Spain June 21-23, 2023.

**Stout, D.** “Steps to a cognitive science of technology.” *Society for Psychological Anthropology, Biennial Meeting*. April 27-30, 2023. San Diego, California.

**Stout, D.** “The evolution of technology.” Keynote lecture: *The Evolution of Culture and Technology. Symposium*. December 8<sup>th</sup>, 2022. Tel Aviv University, Tel Aviv.

**Stout, D.** “Cumulative culture, biocultural feedback, and the persistent concept of progress in human evolution.” *University of Michigan Museum of Anthropological Archaeology at 100: Michigan’s Mark – Past, Present, Future*. International Conference. September 29–October 2, 2022. Ann Arbor, Michigan.

**Stout, D.** “The Evolution of Technology” *UCLA Center for Behavior Evolution and Culture speaker series*. Los Angeles, USA, 23 May 2022.

**Stout, D.** “Evolution of human technology” *Life in the Universe 2021: Our Past, Present and Future Selves*. Online conference, 20-24 November 2021

**Stout, D.** “Technology” Online presentation. Center for Academic Research and Training in Anthropogeny (CARTA) Public Symposium *From Molecules to Societies*. Recorded 9/29/2021, live discussion 16-17 October.

**Stout, D.** “Culture, Mind, and Brain in Human Evolution” Online presentation for Division of Social & Transcultural Psychiatry, McGill University. 7 January 2021.

**Stout, D.** “Stone tools and human evolution: life in the technological niche” Online presentation for Sharma Centre for Heritage Education, India. 23 November 2020.

**Stout, D.** “Neurocognitive foundations of stone tool-making skill learning: an individual differences approach” *Unravelling Past Cognition: Approaches Across Disciplines*, symposium of the 42nd Annual (Virtual) Meeting of the Cognitive Science Society, July 29- August 1, 2020.

**Stout, D.** “The archaeology of skill acquisition” *Material evidence and cognitive evolution*. Centre for Philosophy of the Sciences, School of Philosophy, Australian National University. Canberra, Australia, 15-17 July, 2019.

**Stout, D.** “The syntax of action: language and technology in human evolution” Institut de Neurosciences de la Timone seminar series. Marseille, France. 26 April 2019.

**Stout, D.** “Human Evolutionary Neuroscience: Life in the Technological Niche” McGill University *Culture, Mind & Brain Program* and *Healthy Brains Healthy Lives Initiative Seminar Series*. Montreal, Quebec. 14 March 2019.

**Stout, D.** “Language and Technology in Human Evolution” Cornell Cognitive Science Program Colloquium Series. Ithaca, NY. 26 October, 2018.

**Stout, D.** “Early Hominin Stone Tools” Center for Academic Research and Training in Anthropogeny (CARTA) Public Symposium *Impact of tool-use and technology on the evolution of the human mind*. Salk Institute, La Jolla, CA, 12 October 2018.

**Stout, D.** “Technology and Language in Human Evolution” Center for Academic Research and Training in Anthropogeny (CARTA) Private Symposium *Impact of tool-use and technology on the evolution of the human mind*. Salk Institute, La Jolla, CA, 13 October 2018.

**Stout, D.** “Tool-making & Language: neuro-computational models of action syntax in human evolution.” Invited Symposium, Kyoto Conference on Evolving Linguistics 2018, Kyoto, Japan, 6 August 2018.

**Stout, D.** “Stone tools and language evolution: the technological pedagogy hypothesis.” Invited lecture, Brain Science Institute, Tamagawa University, Tokyo, Japan, 4 August 2018

**Stout, D.** “Stone tools and language evolution: the technological pedagogy hypothesis.” Invited Symposium, Japanese Society for Language Sciences 20th Annual International Conference, Fujimino Campus, Bunkyo Gakuin University, Tokyo, Japan, 3 August 2018.

**Stout, D.** Pargeter, J.\* Khreisheh, N.\*, Bryant, K.\*, Hecht, E.E. “The “molecular genetics” of social learning: skill acquisition and individual differences in learning.” *Social Learning in the Paleolithic: Experimental Approaches*. Session of the Society for American Archaeology annual meetings, Washington DC, 13 April 2018

Benevise, M.\*\*, Putt, S., **Stout, D.** “Pedagogy in the Paleolithic? The Influence of Verbal Teaching on Stone Knapping Skill Acquisition” *Social Learning in the Paleolithic: Experimental Approaches*. Session of the Society for American Archaeology annual meetings, Washington DC, 13 April 2018

**Stout, D.** Keynote presentation “*Homo artifex*: tool-making and human brain evolution” at the Clayton State University 2017 Student Academic Conference on April 28, 2017.

**Stout, D.** “The evolutionary neuroscience of cumulative culture” George H. Odell Seminar Series, University of Tulsa, OK, February 16, 2017.

**Stout, D.** “Skill learning, neuroplasticity and exaptation in the evolution of human tool-making and language” Extension of Biology through Culture: Arthur M. Sackler Colloquium of the National Academy of Sciences. Beckman Center, Irvine, CA, November 15-17, 2016.

**Stout, D.** “Stone tools and human brain evolution” *Evolution du cerveau et des capacités cognitives des hominides fossils depuis Sahelanthropus tchadensis, il y a sept millions d’années, jusqu’à l’homme moderne*. International Colloquium, Centre Européen de Recherches Préhistoriques de Tautavel, France, October 27-30, 2016.

**Stout, D.** “Homo artifex: skill and human brain evolution.” *Stone Age Institute conference series*, Indiana University, Bloomington, IN, October 10, 2016.

**Stout, D.** Attendee: Foundation for Psychocultural Research, Culture, Mind and Brain book-writing workshop. Santa Monica, CA, October 7-8, 2016.

**Stout, D.** Attendee: *Turkana Basin Institute Human Evolution Workshop XIII* “Rethinking tool-making.” TBI-Turkwel, Kenya, August 2-6, 2016.

**Stout, D.** “Tools, Language, and Archaeology” ABL Workshop “From Tools and Gestures to the Language-Ready Brain”: Emory Conference Center Hotel (April 10-12, 2016).

**Stout, D.,** Khreisheh, N., Hecht, E.E., Li, Z., Hu, X. “Neural basis of tool-making skill learning: structure, function and evolution”, 85th annual meeting of the American Association of Physical Anthropologists: Atlanta. GA (April 13 -16, 2016)

**Stout, D.** “Homo artifex: tools, skill and human brain evolution” *Evolutionary Anthropology 2015-2016 Seminar Series*, Duke University, Durham, North Carolina. 6 November, 2015.

**Stout, D.** “Empirical Evolutionary Anthropology” *ABLE Workshop: Vision and Language in the Context of Brain, Evolution and Computation*. Michael Arbib, organizer. Chicago, IL, 13-14 October 2015.

**Stout, D.** "Human Brain Evolution: History or Science?" *32<sup>nd</sup> Altenberg Workshop in Theoretical Biology: Is Paleoanthropology an Evolutionary Science?* Konrad Lorenz Institute, Klosterneuburg, Austria, 17-20 September, 2015.

**Stout, D.** "Stone tool-making and the right cerebral hemisphere" *Cognitive Archaeology*. Session of the Society for American Archaeology annual meetings, San Francisco, CA, 16 April 2015.

**Stout, D.** "Naturalistic fracture mechanics: technology, skill, and debitage morphology" *Lithics, evolution, science*. Session of the International Union of the Prehistoric and Protohistoric Sciences World Congress in Burgos, Spain, 2 September 2014.

**Stout, D.** "Experimental Neuroarchaeology" *Duke Institute for Brain Sciences Workshop: Reading the Past: Mind, Brain, and Archaeology*. Duke University, Durham, North Carolina, 10 April, 2014.

**Stout, D.** "Skill learning and human brain evolution" *Homo docens: The evolution of education*. Workshop held at the Stellenbosch Institute for Advanced Study, Stellenbosch, South Africa, 18-20 November, 2013. P. Gardenfors and A. Hogberg, chairs.

**Stout, D.** "*Homo faber*: stone tools and human brain evolution" *Issues in Cognitive Science series*, Rensselaer Polytechnic Institute, Cognitive Science Department, Troy, New York, 23 October, 2013.

**Stout, D.** "Neuroarchaeology" *On the cutting-edge: new methods and theory for analyzing stone tools*. A joint Amerind Museum / Simon Fraser University / University of Missouri symposium, Dragoon, Arizona, 20-23 September, 2013

**Stout, D.** "Social Neuroscience of Stone Tool-Making Skill Acquisition" *Replacement of Neanderthals by Modern Humans 2012 International Conference*. Tokyo, Japan, 18-24 November, 2012.

**Stout, D.** Discussant. *Ernst Strüngmann Forum: Cultural Evolution*. Peter J. Richerson and Morten H. Christiansen, Chairpersons. Frankfurt, Germany, 27 May - 1 June, 2012.

**Stout, D.** "Evolution of dorsal and ventral streams" *Processing along dorsal and ventral streams in the brain: A multidisciplinary discussion on current questions in language, attention, music, memory, calculation and the motor system*. Discussion meeting hosted by the Freiburg Institute for Advanced Studies and Department of Neurology, Freiburg, Germany, 13-14 October, 2011.

**Stout, D.** Discussant. *Ernst Strüngmann Forum: Language, music and the brain a mysterious relationship*. Michael Arbib, Chairman. Frankfurt, Germany, 8-13 May, 2011.

**Stout, D.** "*Homo artifex*: object manipulation in human evolution" *Object manipulation as a window on the mind*. Session of the 23<sup>rd</sup> Congress of the International Primatology Society, Kyoto, Japan, 12-18 September, 2010.

**Stout, D.** "Stone tools and the evolution of human culture and cognition" *Culture Evolves*. Joint Royal Society and British Academy discussion meeting in honor of the 350th anniversary of the Royal Society. Queen Elizabeth Hall, Southbank Centre, London, 28 – 30 June 2010.

**Stout, D.** "Stone tools and human brain evolution" *Twenty-Seventh European Workshop on Cognitive Neuropsychology*, Bressanone, Italy, 25-30 January, 2009

**Stout, D.** "The neural correlates of Early Stone Age tool-making" *The Sapient Mind: Archaeology meets Neuroscience*, McDonald Institute for Archaeological Research, Cambridge, 14-16 September 2007.

**Stout, D.** "The neural correlates of Early Stone Age tool-making" *The Human Brain Evolving: Papers in Honor of Ralph L. Holloway*, Indiana University, Bloomington, 27-28 April 2007.

**Stout, D.** "A quantitative assessment of Mode I knapping skill" *Interdisciplinary Approaches to the Oldowan*, Session of the Society for American Archaeology meetings in San Juan, Puerto Rico, 27 April 2006.

**Stout, D.** "Tools, language and the brain in human evolution" *Stone Tools and the Evolution of Human Cognition*, Session of the Society for American Archaeology meetings in San Juan, Puerto Rico, 27 April 2006.

**Stout, D.** "Technology, context and meaning in human evolution: the contribution of ethnoarchaeology" *Linking the Past to the Present: Recent Studies in Forager and Farmer Ethnoarchaeology*, Session of the Society for American Archaeology meetings in Salt Lake City, 30 March – 3 April, 2005.

**Stout, D.** "Raw material selectivity and technological sophistication of the earliest stone toolmakers" *Applied Actualism: Experimental Studies of Hominid Activity Traces*, Session of the Society for American Archaeology meetings in Montreal, 31 March – 4 April, 2004.

**Stout, D.** "An interactionist approach to skilled production in human evolution", *Skilled production and social reproduction: Aspects of traditional stone tool technologies*. Uppsala, Sweden, 20-24 August, 2003.

**Stout, D.** "Psychological dimensions of stone tool production: the stone adze makers of West Papua (Irian Jaya)", *Skilled production and social reproduction: Aspects of traditional stone tool technologies*. Uppsala, Sweden, August 20-24, 2003.

**Stout, D.** "Ethnographic and neuroscientific approaches to understanding stone knapping skill", *Knapping stone: a uniquely hominid behavior?* International Workshop, Pont-À-Mousson, France; 21-24 November, 2001.

#### General Sessions:

Pargeter, J\*, Khreisheh, N.\*, Shea, J., **Stout, D.** "Knowledge vs. Know-How? Dissecting the foundations of stone knapping skill." *Paleoanthropology Society* meeting, Albuquerque, NM (April 9-10, 2019) Presented by postdoctoral researcher Justin Pargeter.

Khreisheh, N.\*, Coolidge, F., **Stout, D.** "Individual differences in stone tool making aptitude and executive function: implications for cognitive evolution," *Paleoanthropology Society* meeting, Atlanta, GA (April 12-13, 2016) Presented by postdoctoral researcher Nada Khreisheh.

**Stout, D.** "Technological variation in the earliest Oldowan from Gona, Ethiopia" *Paleoanthropology Society* meeting, Vancouver, 2008.

**Stout, D.** "Stone tools and the brain: the neural substrates of Mode I knapping skill as revealed by Positron Emission Tomography (PET)", *Paleoanthropology Society* meeting, Tempe, 2003.

**Stout, D.** "Stone tools and cognition in social context: an ethnoarchaeological study from New Guinea", *Paleoanthropology Society* meetings, Kansas City, 2001.

## **Teaching**

### Emory

Instructor, MBC 600: *Research Group Seminar in Mind, Brain, and Culture*, Spring 2018 -  
Instructor, MBC 501: *MBC Certificate Core Course*, Spring 2019 -  
Instructor, Anth 503: *Evolutionary Processes*, Spring 2014 -  
Instructor, Anth 585: *Anthropology of Technology*, Spring 2013  
Instructor, Anth 585: *Evolution, Brain, and Mind*, Fall 2009 –  
Instructor, Anth 385: *Paleolithic Archaeology*, Fall 2012 -  
Instructor, Anth 316: *Evolution of the Human Brain and Mind*, Spring 2010 -  
Instructor, Anth 304W: *Paleolithic Archaeology*, Fall 2017  
Instructor, Anth 204: *Introduction to Archaeology*, Spring 2010 -  
Coordinator, Anth 555: *Biological Anthropology Seminar*, 2011 - 2013  
Contributor, Psyc 730: *fMRI Research Group*, 2010 - 2012

### UCL

Instructor, Arch G183: *Evolution of Human Cognition (Masters seminar)*, 2009  
Instructor, Arch G120: *Approaches to Artefact studies (MA core course)*, 2007-2008  
Instructor, Arch 3070: *Ethnoarchaeology and Experimental Archaeology*, 2007  
Instructor, Arch 3067: *Cognitive Evolution and Early Technology*, 2006-2007  
Instructor, Arch G168: *Ethnoarchaeology (Masters seminar)*, 2006-2008  
Instructor: *Flintknapping*, Experimental Archaeology Field Course, 2005-2008  
Contributing lecturer, Arch C598: *Lithic Technology*, 2007  
Contributing lecturer, Arch 1003: *Past Societies (1<sup>st</sup> year core course)*, 2005-2007

### GWU

Instructor, Anth 149: *The Evolution of Human Intelligence*, Spring 2005  
Instructor, Anth 003: *Introduction to Archaeology*, Fall 2004, Spring 2005  
Instructor, Anth 183: *Human Cultural Beginnings (Paleolithic Archaeology)*, Fall 2004

### IU

Faculty Research Mentor: *McNair Scholars Summer Research Program*, 2004  
(*The McNair Scholars Program helps to prepare low-income, first-generation and minority students for graduate work by supporting them through a 10-week, faculty-guided independent research project*)  
Instructor, A105: *Human Origins and Prehistory*, Fall 1997, Spring 1997, Summer Session 1998  
Teaching Assistant, A105: *Human Origins and Prehistory*, Fall 1996, Spring 1998  
A521: *Internship in Teaching Anthropology*, Fall 1996

## **Advising**

### Post-Doctoral

Dr. Justin Pargeter, Paleolithic Technology Lab, Emory University Dept. of Anthropology, 2017-19  
Dr. Katherine Bryant, Paleolithic Technology Lab, Emory University Dept. of Anthropology, 2016-17  
Dr. Nada Khreisheh, Paleolithic Technology Lab, Emory University Dept. of Anthropology, 2014-16  
Dr. Erin Hecht, Paleolithic Technology Lab, Emory University Dept. of Anthropology, 2013  
Dr. Jan Apel, Institute of Archaeology, UCL, 2007-8

### Doctoral

*Principle Supervisor:* Daniel Coppeto (ANT), 2019-20; Cheng Liu (ANT) 2019-; Grace Veatch (ANT) 2018-; Megan Beney (ANT) 2016- ; Matthew Duval (ANT), 2010-2012; Joshua Robinson (ANT), 2010-2014  
*Secondary Supervisor:* Katherine Bryant (Neurosci), 2011-15, Daniel Coppeto (ANT), 2012-16, Christina Tzeng (PSY), 2013 –16, Christina Rogers, 2015 - 2019, Ryan James Brady (PSY) 2017-2020  
*External Dissertation Committee Member/Thesis Examiner:* Mathew Caruana, University of Witwatersrand, 2013; Erin Marie Williams, George Washington University, 2011

### Other Graduate

Faculty Advisory Committee: Sam Hunley (PSY), 2013

### Undergraduate Honors Theses

Committee Member: Katherine Marklein, 2010; Daniel Brubaker, 2010; Amanda Winburn, 2011; Wes Smith, 2012; Julia Commander, 2013; Nadine Juwita Jacquez, 2014; William Snyder, 2015; Jana Muschinski, 2015; Hannah Smagh, 2015; Nicholas Singletary, 2016; Aditi Majoe 2019

### SIRE/RPP Undergraduate Research Faculty Mentor

Julia Commander, 2011-2012  
Aditi Majoe, 2017-2018  
Taylor Robinson, 2018-2019  
Valeria Funes, 2022-2023

## **Professional Service**

### University, College, & Departmental:

Director, Emory University Center for Mind, Brain, and Culture, 2022 –  
Associate Director, Emory University Center for Mind, Brain, and Culture, 2016 - 2022  
Director of Graduate Studies, Department of Anthropology, 2017 - 2022  
Program Director, Graduate Certificate in Mind, Brain, and Culture 2016 -  
Faculty Search Committee, open hire, Department of Anthropology, Emory University, 2019 - 20  
Woodruff Fellowship Selection Committee, 2018, 2019  
CFDE Emory Conference Center Subvention Fund review committee, 2016 -  
Graduate Admissions Committee, Department of Anthropology, Emory University, 2016, 17, 20  
Graduate Concerns Committee, Department of Anthropology, Emory University, 2016 –  
Emory Scholars Program Reading Retreat, January 22-23, 2016  
Dean’s Teaching Fellowship Selection Committee, 2015-16  
Center for Mind, Brain and Culture Advisory Committee, 2014-2016  
SIRE Program for Undergraduate Research, Grants Review Committee, Emory University, 2009 –



Colloquium Committee, Department of Anthropology, Emory University, 2016 – 17

Faculty Search Committee, Primatologist hire, Department of Anthropology, Emory University, 2014 – 15

Graduate Admissions Committee, Department of Anthropology, Emory University, 2011 - 2015

Undergraduate Concerns Committee, Department of Anthropology, Emory University, 2012 - 2015

Faculty Search Committee, Paleoanthropologist hire, Department of Anthropology, Emory University, 2013 – 14

Faculty Search Committee, Behavioral Ecology hire, Department of Anthropology, Emory University, 2012 - 13

University Research Council, social science and behavioral science subcommittee, Emory University, 2012 - 2014

Undergraduate Admissions Tutor, Institute of Archaeology, University College London, 2008 – 2009

Degree Tutor, MA in Artifact Studies, Institute of Archaeology, University College London, 2007 – 2008

Affiliate (Study Abroad) Student Tutor, Institute of Archaeology, University College London, 2005 – 2009

Deputy Undergraduate Admissions Tutor, Institute of Archaeology, University College London, 2005 – 2008

Personal Tutor, Institute of Archaeology, University College London, 2005 – 2009

Graduate Research Student Supervision Sub-Committee, Institute of Archaeology, University College London, 2005 – 2009

Archaeology representative, 2004 Cotlow Research Awards Committee, Department of Anthropology, George Washington University. (*The Lewis B. Cotlow Field Research Fund is an endowment that provides field research grants to GWU undergraduate students on a competitive basis*)

Disciplinary:

Associate Editor: Journal of Human Evolution 2017-2020

Associate Editor: Evolutionary Human Sciences 2018-

Program Committee for the 39th Annual Meeting of the Cognitive Science Society

Editorial Advisory Board: *Azania: Archaeological Research in Africa* 2009-21

*Ad hoc* Reviewer: *Proceedings of the National Academy of Sciences*, *Nature Communications*, *Philosophical Transactions of the Royal Society B*, *Evolutionary Anthropology*, *PLoS One*, *Current Anthropology*, *American Journal of Physical Anthropology*, *Journal of Human Evolution*, *Journal of Archaeological Science*, *Topics in Cognitive Science*, *Journal of Paleolithic Archaeology*, *Journal of*

*Language Evolution, Interaction Studies Laterality, Cambridge Archaeological Journal, PaleoAnthropology Journal, Ethnoarchaeology, Journal of Archaeological Method and Theory*

Grant Reviewer: NSF, Leakey Foundation, Human Frontier Science Program, Templeton Foundation

Book Reviewer: MIT Press, Left Coast Press

Associate (Peer Commentator): *Behavioral and Brain Sciences, Current Anthropology*