

Shelby S. Putt

Curriculum Vitae

1392 W Dittamore Rd
Gosport, IN 47433

E-mail: ssputt@indiana.edu
Phone: 1-260-246-9922

EDUCATION AND PROFESSIONAL HISTORY

Ph.D., Anthropology, 2016

University of Iowa, Iowa City, Iowa

- Dissertation: *Human Brain Activity during Stone Tool Production: Tracing the Evolution of Cognition and Language*

M.A., Anthropology, 2011

University of Iowa, Iowa City, Iowa

B.A., Anthropology and English & Linguistics, 2009

Indiana University, Fort Wayne, Indiana

- Graduated *summa cum laude*
- Boas Award for graduating Anthropology major with the highest GPA
- *Greater Fort Wayne Business Weekly's* Outstanding Graduate

A.A., International Language and Culture Studies, 2009

Indiana University, Fort Wayne, Indiana

Research Certificate in Anthropology, 2009

Indiana University, Fort Wayne, Indiana

Professional and Academic Positions

2016-present Postdoctoral Research Fellow, The Stone Age Institute and the Center for Research into the Anthropological Foundations of Technology, Indiana University

2009-15 Teaching and Research Assistant, Department of Anthropology, University of Iowa

2009 Teaching Assistant, Division for Continuing Studies, Indiana U. Purdue U. Fort Wayne (IPFW)

2008-09 Lab and Field Technician, IPFW Archaeological Survey

2007-09 Tutor, The Center for Academic Support and Advancement, IPFW

2006-09 Research Assistant, University Park Research Center, Inc.

SCHOLARSHIP

Publications

Refereed Journal Articles

- 2017 **Putt S.S.**, Wijekumar, S., Franciscus, R.G., Spencer, J.P. The functional brain networks that underlie Early Stone Age tool manufacture. *Nature Human Behaviour* 1(102), 1-8. DOI: 10.1038/s41562-017-0102.
- 2015 **Putt S.S.** The origins of stone tool reduction and the transition to knapping: An experimental approach. *Journal of Archaeological Science: Reports* 2, 51-60. DOI: 10.1016/j.jasrep.2015.01.004.
- 2014 **Putt S.S.**, Woods A.D., Franciscus R.G. The role of verbal interaction during experimental biface stone tool-making. *Lithic Technology* 39(2), 96-112. DOI: 10.1179/0197726114Z.00000000036.

Thesis

- 2016 **Putt S.S.** *Human Brain Activity during Stone Tool Production: Tracing the Evolution of Cognition and Language*, Ph.D. thesis, University of Iowa, Iowa City, IA. URL: <http://ir.uiowa.edu/etd/2133>

Other Publications

- 2017 **Putt S.S.** Brain-imaging modern people making Stone Age tools hints at evolution of human intelligence. *The Conversation*. URL: <https://theconversation.com/brain-imaging-modern-people-making-stone-age-tools-hints-at-evolution-of-human-intelligence-77231>
Republished in *Smithsonian Magazine*, *Sapiens*, *RealClear Science*, *The USA Bulletin*, + at least 20 other news sources
- 2009 **Putt S.S.** Captive orangutan locomotion and its relation to the origin of human bipedalism. *Lambda Alpha Journal* 39, 23-38.
URI: <http://hdl.handle.net/10057/3263>

Works in Progress

- In review **Putt S.S.** Tracing the evolutionary trajectory of verbal working memory with neuro-archaeology. Invited companion paper for *How the Brain Got Language: Towards a New Road Map* workshop, to be published in a special double issue of *Interaction Studies*.
- In revision **Putt S.S.** The stories stones tell of language and its evolution. In F.L. Coolidge and K.A. Overmann (Eds.), *Squeezing Minds from Stones*. Oxford: Oxford University Press.

Grants and Fellowships

External Grants and Fellowships

- 2016 William S. Pollitzer Student Travel Award, American Association of Physical Anthropologists (\$500).
- 2015-16 American Dissertation Fellowship, **American Association of University Women** (\$20,000).
- 2014-16 Research Grant, **The Leakey Foundation**: “Investigating the co-evolution of language and toolmaking: An fNIRS study.” PI: **Putt S.S.** (\$14,252).
- 2014-16 Dissertation Fieldwork Grant, **The Wenner-Gren Foundation**: “Experimental investigation of the co-evolution of language and toolmaking in the brain: An fNIRS study.” PI: **Putt S.S.** (\$15,768).
- 2014-15 Sigma Xi Grant-in-Aid of Research, **The Scientific Research Society**: “The effect of language on cortical activity during bifacial stone tool reduction: An fNIRS study.” PI: **Putt S.S.** (\$800).

Internal Grants and Fellowships

- 2014 Graduate Student Senate Travel Grant, University of Iowa.
- 2014 Graduate College Summer Fellowship, University of Iowa.
- 2013 ECGPS Research Grant, University of Iowa.
- 2013 June Helm Travel Fellowship, University of Iowa.
- 2013 ECGPS Travel Grant, University of Iowa.
- 2013 PAGS Professional Development Grant, University of Iowa.
- 2013 Summer Graduate Fellow Appointment, University of Iowa.
- 2012 Graduate Student Senate Travel Grant, University of Iowa.
- 2010-11 Summer Graduate Fellow Appointment, Department of Anthropology, University of Iowa.
- 2009 Student Dissertation Travel Grant, Center for Global and Regional Environmental Research, University of Iowa: “Taphonomic processes at the Ngandong *Homo erectus* site, Java, Indonesia.”
- 2009-15 Tuition Scholarship, University of Iowa.

Presentations

Invited lectures/symposia/workshops

- 2017 **Putt S.S.** Tracing the evolutionary trajectory of verbal working memory with neuro-archaeology. Invited lecturer and discussant for the workshop, *How the Brain Got Language: Towards a New Road Map* (M. Arbib, organizer). National Science Foundation Grant (BCS-1343544): Action, Vision and Language, and Their Brain Mechanisms in Evolutionary Relationship. La Jolla, CA, 8/29-8/31.
- 2015 **Putt S.S.** Working Memory and the Evolving Hominin Brain. Invited lecturer for the Department of Anthropology, IPFW, Fort Wayne, IN 12/3.
<https://www.youtube.com/watch?v=jAzcNZCGomo>
- 2015 **Putt S.S.** Working Memory and Early Stone Age Tool Manufacture. Invited lecturer for the Archaeological Institute of America, Iowa City, IA, 11/9.
- 2015 **Putt S.S.** Sexual Harassment in the University and Its Toll on Women in Science. Invited lecturer for the AAUW-Iowa eNetwork Online Branch web conference, 10/19.
- 2015 **Putt S.S.** The Evolution of Thought on the Evolution of Early Hominin Tool Use Cognition: Where Do We Go from Here? Invited lecturer and discussant for the symposium, *Evolution of Tool Use: Animal and Human Perspectives* (M. Haslam, organizer). Oxford University Museum of Natural History, Oxford, England, 8/3.
- 2014 **Putt S.S.,** Wijekumar S., Franciscus R.G., Spencer J.P. Flintknapping on the Brain: Exploring the Verbal and Nonverbal Learning Mechanisms Involved in Stone Tool Manufacture with fNIRS. Invited lecturer and discussant for the symposium, *Searching for Traces of the Hominin Mind: Evolutionary Cognitive Archaeology and Theoretical Constructs of Cognition* (R. Mahaney, organizer). 113th Annual Meeting of the American Anthropological Association, Washington, D.C., 12/6.

International Conference Presentations and Published Abstracts

- 2017 **Putt, S.S.,** Wijekumar, S., Franciscus, R.G., Spencer, J.P. Functional Neuroimaging Insights into Acheulian Cognition and Hominin Brain Evolution. Paper presented at the 86th Annual Meeting of the American Association of Physical Anthropologists, New Orleans, LA.
- 2016 **Putt, S.S.,** Wijekumar, S., Franciscus, R.G., Spencer, J.P. The Neural Correlates of Prehistoric Stone Tool Manufacture. Poster presented at the 2016 Biennial Meeting of the Society for functional Near-Infrared Spectroscopy, Paris, France.

International Conference Presentations and Published Abstracts (continued)

- 2016 **Putt, S.S.**, Wijekumar, S., Franciscus, R.G., Spencer, J.P. How Linguistic Instruction Reorganizes the Neural Networks Involved in Stone Tool Knapping. *American Journal of Physical Anthropology* 159, 258-258. DOI: 10.1002/ajpa.22955. Paper presented at the 85th Annual Meeting of the American Association of Physical Anthropologists, Atlanta, GA.
- 2016 Daniel, C., **Putt, S.S.**, Franciscus, R.G. Investigating Other Causes for Stone Flake Features Attributed to Handedness. Poster presented at 81st Annual Meeting of the Society for American Archaeology, Orlando, FL.
- 2015 **Putt S.S.** The Origins of Stone Tool Reduction and the Transition to Knapping: An Experimental Approach. *PaleoAnthropology* 2015, A25-A26. DOI: 10.4207/PA.2015.ABS13. Poster presented at the 2015 Annual Meeting of the Paleoanthropology Society and 80th Annual Meeting of the Society for American Archaeology, San Francisco, CA.
- 2014 Dellopoulos E.K., **Putt S.S.** Performativity and Pedagogy: The Effect of Verbal and Nonverbal Instruction on Experimental Acheulian Handaxe Symmetry. Poster presented at 113th Annual Meeting of the American Anthropological Association, Washington, D.C.
- 2014 Daniel C., **Putt S.S.** Determining Handedness from Stone Tool Reduction. Poster presented at 113th Annual Meeting of the American Anthropological Association, Washington, D.C.
- 2013 **Putt S.S.** Why Humans Would Not Have the Capacity for Imitation, Pedagogy, Language, nor Culture without Mirror Neurons. Paper presented at the 112th Annual Meeting of the American Anthropological Association, Chicago, IL.
- 2012 **Putt S.S.**, Woods A.D., Franciscus R.G., Ciochon R.L. Acheulian handaxe production in verbal and non-verbal experimental learning environments. Poster presented at the 77th Annual Meeting of the Society for American Archaeology, Memphis, TN.

Departmental Presentations

- 2016 **Putt S.S.** A Re-evaluation of the Technological Origin for Language Hypothesis. Brown Bag Lecture Series. Department of Anthropology, University of Iowa. Spoken presentation, 4/8.
- 2016 **Putt S.S.** Working Memory and Early Stone Age Tool Manufacture. Evolution of Human Cognition Seminar Series. Cognitive Science Program, Indiana University. Spoken presentation, 4/5.

Departmental Presentations (continued)

- 2015 **Putt S.S.** Pre-Oldowan Possibilities? A Reconsideration of the Percussive Behaviors of Pliocene Hominins. Brown Bag Lecture Series, Department of Anthropology, University of Iowa. Spoken presentation, 4/10.
- 2015 **Putt S.S.** Flintknapping on the Brain. Roundtable Lecture Series, DeLTA Center, University of Iowa. Spoken presentation, 2/13.
- 2014 Moscatel C., Carey S., Kerper R., **Putt S.S.** Butchering Efficiency of Oldowan and Acheulian Replicative Cores: An Experimental Study. Spring Undergraduate Research Festival, University of Iowa. Poster presentation, 4/9.
- 2014 Daniel C., **Putt S.S.** Determining Handedness from Flake Production. Spring Undergraduate Research Festival, University of Iowa. Poster presentation, 4/9.
- 2014 Dellopolous E., **Putt S.S.** A Controlled Study to Test the Effect of Verbal and Nonverbal Instruction on Experimental Handaxe Symmetry. Spring Undergraduate Research Festival, University of Iowa. Poster presentation, 4/9.
- 2013 **Putt S.S.** Why Humans Would Not Have the Capacity for Imitation, Pedagogy, Language, nor Culture without Mirror Neurons. Brown Bag Lecture Series, Department of Anthropology, University of Iowa. Spoken presentation, 11/14.
- 2011 **Putt S.S.** The Silent Toolmakers: A Pilot Experiment into the Relationship between the Acheulian and Spoken Language. Brown Bag Lecture Series, Department of Anthropology, University of Iowa. Spoken presentation, 4/22.
- 2009 **Putt S.S.** Captive Orangutan Locomotion and Its Relationship to the Origin of Human Bipedalism. Student Research Symposium, Department of Anthropology, IPFW. Spoken presentation, 4/25.

Media Appearances & Research in the News

- Forthcoming Title TBA (Author: Douglas Fox). *Sapiens*, Date TBA. <http://www.sapiens.org/>
- Forthcoming Title TBA (Author: Andrew Curry). *Archaeology Magazine*, Date TBA. <http://www.archaeology.org/>
- Forthcoming Title TBA (Author: Andrew Curry). *Nature Careers*, 11/9. <http://www.nature.com/nature/careers/index.html>
- Forthcoming Title TBA (Author: Bridget Alex). *Discover Magazine*, Date TBA. <http://discovermagazine.com/>

Media Appearances & Research in the News (continued)

- Forthcoming Origin Stories: Title TBA (Interviewer: Meredith Johnson). *The Leakey Foundation*, Date TBA. <https://leakeyfoundation.org/outreach/origin-stories-podcast/>
- 2017 The Academic Minute: Functional Brain Networks and Early Stone Tools. *WAMC Northeast Public Radio*, 6/12. <https://academicminute.org/2017/06/shelby-putt-indiana-university-functional-brain-networks-and-early-stone-tools/>
Republished on *Inside Higher Ed*
- 2017 Neuroarchaeology and an Indonesian Seafood Experience (Interviewer: Colin Amundson). *Cooking with Archaeologists*, 5/31. <http://www.cookingwitharchaeologists.com/neuroarchaeology-and-an-indonesian-seafood-experience/>
- 2017 How an Iowa grad studied the brain-patterns of our Stone Age ancestors: BTN LiveBig (Author: Eli Kaberon). *Big Ten Network*, 5/26. <http://btn.com/2017/05/26/how-an-iowa-grad-studied-the-brain-patterns-of-our-stone-age-ancestors-btn-livebig/>
- 2017 L'intelligence de type humain remonte à 1,75 million d'années (Author: Elena Sender). *Sciences et Avenir*, 5/22. https://www.sciencesetavenir.fr/archeo-paleo/la-cognition-de-type-humain-remonte-a-1-75-million-d-annees_113122
- 2017 Neuroarchaeology: Language and stone tools in the brain (Author: Natalie Uomini). *Nature Human Behaviour* 1(114) 1-2, 5/15.
- 2017 Science Friday: Ancient *Homo naledi* may have walked alongside early humans (Interviewer: Ira Flatow). *Public Radio International*, 5/12. <http://sciencefriday.com/segments/ancient-homo-naledi-may-have-walked-alongside-early-humans/>
- 2017 Stone Age axes may explain how children develop musical abilities (Author: Joshua A. Krisch). *Fatherly*, 5/8. <https://www.fatherly.com/kids-health-and-development/musicbrain/>
- 2017 'Humanlike' thought evolved 1.8 million years ago, IU neuroarchaeologist finds (Author: Kevin Fryling). *News at IU Bloomington*, 5/8. <https://news.iu.edu/stories/2017/05/iub/09-science-neuroarcheology-study.html>
Republished in *Big Think*, *Science Daily*, *EurekaAlert!*, + other news sources
- 2017 How playing the piano is linked to 1.7-million-year-old technological breakthrough (Author: Ian Johnston). *The Independent*, 5/8. <http://www.independent.co.uk/news/science/playing-piano-linked-technology-breakthrough-hand-axes-homo-sapiens-neuroarchaeology-a7717941.html>
Republished in *United Kingdom News*

Media Appearances & Research in the News (continued)

- 2017 Changes in Early Stone Age tool production have ‘musical’ ties (Author: Cat Bartman). *University of East Anglia Media Room*, 5/8. <https://www.uea.ac.uk/about/-/changes-in-early-stone-age-tool-production-have-musical-ties>
Republished in *New York Post*, *The Sun*, *The Times*, *Wired*, *Popular Archaeology*, *Science Daily*, *EurekAlert!*, + at least 115 other news sources
- 2015 Putt receives American Fellowship. *Iowa Now*, 8/12. <https://now.uiowa.edu/2015/08/putt-receives-american-fellowship>
- 2015 Grantee spotlight: Shelby S. Putt. *The Leakey Foundation*, 1/29. <https://leakeyfoundation.org/2014grantee-spotlight-shelby-putt/>

RESEARCH EXPERIENCE

Laboratory and Zoological Research

- 2013-16 Student researcher, Neuroimaging research at the CHILDS Laboratory, University of Iowa, Iowa City, Iowa, under the direction of Dr. John Spencer
Responsibilities: Designed and carried out experiments, analyzed data, reported results, funded lab with grants, hired staff, supervised staff and student volunteers
- 2010-16 Student researcher, Lithic technology research at the Paleolithic Technology Laboratory, University of Iowa, Iowa City, Iowa
Responsibilities: Designed and carried out experiments, analyzed data, reported results, funded lab with grants, hired staff, supervised staff and student volunteers
- 2008 Student researcher, Zoological research at Fort Wayne Children’s Zoo, Fort Wayne, Indiana, under the direction of Dr. Richard Sutter, IPFW
Responsibilities: Recorded orangutan locomotion bouts with behavioral coding system, analyzed data, reported results

Paleoanthropological and Archaeological Fieldwork

- 2010 Crew member, Paleoanthropological excavation at Ngandong, Java, Indonesia, under the direction of Dr. Russell Ciochon, University of Iowa, and Dr. Yahdi Zaim, Institut Teknologi Bandung
Responsibilities: Operated the Total Data Station, supervised excavation, processed fossils, photography
- 2008 Crew member, Phase 1 shovel probing at Beckett’s Run, Fort Wayne, Indiana, IPFW
- 2008 Crew member, Phase 1 shovel probing at Hamilton County, Indiana (12-H-993), IPFW

Paleoanthropological and Archaeological Fieldwork (continued)

- 2008 Crew member, Prehistoric excavation at Strawtown enclosure, Hamilton County, Indiana (12-H-883), under the direction of Dr. Robert McCullough, IPFW
Responsibilities: Excavation, operated the Total Data Station
- 2008 Crew member, Phase 1 shovel probing for Illinois Road project, Fort Wayne, Indiana, IPFW
- 2008 Crew member, Historic excavation at Mount Auburn Cemetery, Greenwood, Indiana, under the direction of Dr. Robert McCullough, IPFW
Responsibilities: Excavation, mapping, skeletal material processing
- 2008 Crew member, Phase 1 shovel probing at Indiana Dunes, Chesterton, Indiana, IPFW
- 2008 Volunteer crew member, Historical excavation at Collier Lodge Site, Kouts, Indiana, under the direction of Dr. Mark Schurr, University of Notre Dame
- 2008 Field School Student, Prehistoric excavation in Allen County, Fort Wayne, Indiana, (12-AL-15) under the direction of Dr. Robert McCullough, IPFW
Skills: Excavation methods, Total Data Station, surveying, preservation of materials, photography, cataloguing.

TEACHING EXPERIENCE

Teaching Award

Outstanding Teaching Assistant Award, University of Iowa, 2015

Courses Taught

University of Iowa, Department of Anthropology

- 2009-15 Human Origins (Teaching Assistant)
2014 Anthropology and Contemporary World Problems (Teaching Assistant)
2014 Reconstructing the Past with Experimental Archaeology (Instructor of Record)
2013-14 The Evolution of Human Language and Cognition (Instructor of Record)
2010 Introduction to the Study of Culture and Society (Teaching Assistant)

IPFW, Department of Anthropology

- 2009 Bioanthropology (Teaching Assistant)

Mentorship/Student Supervision

Undergraduate Theses Advised

University of Iowa, Department of Anthropology

- 2016 Chloe Daniel. The role of handedness in stone tool manufacture: An experimental study.
- 2015 Danielle Jones. The evolution of language: Insights from comparative primate neurobiology.

Undergraduate Student Supervision

- 2015-16 Research Assistant Supervisor, 6 undergraduate students, Paleolithic Technology Laboratory, University of Iowa
- 2011-15 Independent Study Supervisor, 15 undergraduate students, Paleolithic Technology Laboratory, University of Iowa

SERVICE

Service Award

June Helm Award for Service and Excellence in Anthropology, University of Iowa, 2016

Professional Memberships and Affiliations

American Association of Physical Anthropologists
The Paleoanthropology Society
Society for American Archaeology
American Anthropological Association

Peer Review Activities

Squeezing Minds from Stones (1 manuscript reviewed)
Journal of Archaeological Method and Theory (1 manuscript reviewed)
Lithic Technology (1 manuscript reviewed)
Journal of Contemporary Anthropology (2 manuscripts reviewed)

Academic & Community Service

- 2015-16 Secretary of Anthropology Graduate Student Association, University of Iowa
Responsibilities: Recorded meeting minutes and distributed information
- 2013-16 Administrator and Manager of University of Iowa Department of Anthropology
Facebook page: <https://www.facebook.com/UIAnthropology/>

Academic & Community Service (continued)

- 2014-15 Social Chair and founding member of Graduate Women in Science Iota Chi chapter
Responsibilities: Organized networking events, created and managed chapter Facebook page: <https://www.facebook.com/gwisiotachi/>
- 2014-15 Vice President of Anthropology Graduate Student Association, University of Iowa
Responsibilities: Organized weekly Brown Bag Lecture Series, assisted president with graduate student workshops and fundraisers, spearheaded a conference travel grant for Anthropology graduate students
- 2013-14 Treasurer of Anthropology Graduate Student Association, University of Iowa
Responsibilities: Collected money contributions and dispersed funds to officers for purchase of items needed for Brown Bag Lecture Series and workshops
- 2011 Reviewer for Executive Council of Graduate & Professional Students Travel Grants Committee, University of Iowa
- 2011-13 Flintknapping demonstrator for Archaeology Day, University of Iowa
- 2008-09 Vice President of the IPFW Anthropology Club
Responsibilities: Organized a weekly Luncheon Lecture Series and student/professor question panels, acquired funding
- 2008-09 Vice President and founding member of Lambda Alpha Theta, the National Collegiate Honor Society for Anthropology at Indiana University Fort Wayne

Last updated: 8/23/17