

Tanya M. Smith

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Current and Past Academic Positions

- * Visiting Scholar, Museum of Vertebrate Zoology, University of California, Berkeley, 2015-present.
- * Associate Professor, Department of Human Evolutionary Biology, Harvard University, 2012-present.
- * Fellow, Radcliffe Institute for Advanced Study, Harvard University, 2013-2014.
- * Associated Scientist, Department of Human Evolution, Max Planck Institute for Evolutionary Anthropology (MPI-EVA), 2008-2013.
- * Assistant Professor, Department of Human Evolutionary Biology, Harvard University, 2009-2012.
- * Assistant Professor, Department of Anthropology, Harvard University, 2008-2009.
- * Visiting Research Associate, Department of Anthropology, Brandeis University, 2007-2008.
- * Research Scientist (Assistant Professor equivalent), Department of Human Evolution, MPI-EVA, 2006-2008.
- * Postdoctoral Fellow, Department of Human Evolution, MPI-EVA, 2004-2005.

Education

- * Stony Brook University, Interdepartmental Doctoral Program in Anthropological Sciences (IDPAS), 1998-2004: M.A., 2002; Ph.D. with Distinction, 2004.
- * State University of New York (SUNY) at Geneseo, 1993-1997: B.S. in Biology with Honors, 1997.

Postgraduate Professional Development Activities

- * University of Washington Train-the-Trainer (T3) Faculty Diversity Workshop, daylong event, 2015.
- * Harvard Medical School Achieving Healthcare Leadership and Impact through Writing, Publishing and Social Media, 3-day event, 2015.
- * American Association of Physical Anthropologists' Women's Mentoring Workshop, daylong event, 2014.
- * Coaches Training Institute Co-Active Leadership Program, 10-month course with 4 retreats, 2013-2014.
- * Awakening Truth Women's Facilitation Group, 3-month leadership program with 2 retreats, 2013.
- * Harvard University Leadership Skills for Engineering and Science Faculty, 2-day workshop, 2011.
- * University of Washington Women Evolving Biological Sciences (WEBS), 3-day retreat, 2010.
- * Harvard University Public Speaking as a Performing Art, 3-day workshop, 2009.

Fellowships and Grants in Excess of \$10,000

- * Wenner-Gren Foundation Dissertation Research Grant (jointly awarded for Daniel Green's thesis research), \$18,810, *Experimental Reconstruction of Seasonal Rainfall for Paleoclimate Research*, 2014-2015.
- * Wenner-Gren Foundation Hunt Postdoctoral Fellowship, \$40,000, 2013-2014.
- * Radcliffe Institute Fellowship, \$21,375, 2013.
- * NSF Doctoral Dissertation Improvement Grant (jointly awarded for Daniel Green's thesis research), \$33,555, *Experimental Determination of Tooth Mineralization Patterns in Ungulates for Application to Paleoseasonality Reconstruction*, 2012-2014.
- * NSF Physical Anthropology Grant (jointly awarded with Paul Tafforeau), \$221,912, *Resolving Pliocene and Pleistocene Hominin Ontogeny With Synchrotron Virtual Histology*, 2011-2014.
- * Radcliffe Exploratory Seminar Grant (jointly awarded with Arkhat Abzhanov), \$15,000, *Interdisciplinary Perspectives on the Evolution and Development of the Vertebrate Head*, 2011-2012.
- * Harvard University, William F. Milton Fund, \$39,710, *Evolution of Human Childhood*, 2010.
- * NSF Dissertation Improvement Grant (jointly awarded with Lawrence Martin for my thesis research), \$12,000, *Incremental Development of Primate Enamel*, 2002-2004.

Awards and Minor Grants

- * Harvard University, Clark Award, 2013.
- * The Leakey Foundation General Grant (jointly awarded with Zarin Machanda), 2012-2013.
- * Selected Participant for NSF-funded *Women Evolving Biological Sciences (WEBS)* Symposium, 2010.
- * Harvard University, Publication Fund, 2008 & 2010.
- * European Virtual Anthropology Network, EU FP6 Marie Curie Actions (co-investigator), 2006-2009.
- * Stony Brook University President's Award for Distinguished Doctoral Students, 2005.
- * Stony Brook University IDPAS Conference Travel Awards, 2002, 2003 & 2004.
- * Stony Brook University IDPAS Research Travel Awards, 2001 & 2002.
- * Primate Conservation, Inc. Research Grant (jointly awarded with Mitch Irwin), 1999.
- * Margot Marsh Biodiversity Foundation Research Grant (jointly awarded with Mitch Irwin), 1999.
- * Dean's List at SUNY Geneseo, Fall 1994-Spring 1997 (inclusive).
- * SUNY Geneseo Foundation Scholarship, 1997.
- * Second Place for Best Student Research at Tri-Beta Biological Honors Society Regional Convention, 1997.
- * Tri-Beta Biological Honors Society Research Grant, 1996.
- * SUNY Geneseo Foundation Research Grant, 1995.

Peer-Reviewed Publications

62. **Smith, T.M.** (in preparation, expected publication date 2017) *The Tales Teeth Tell: Development, Evolution, Behavior*. MIT Press, Cambridge.
61. Green, D.R., Colman, A.S., Green, G.M., Bidlack, F.B., Tafforeau, P., **Smith, T.M.** (in review) High-resolution synchrotron and stable isotope analyses reveal tooth mineralization patterns for climate reconstruction. *Proc. Natl. Acad. Sci. USA*
60. **Smith, T.M.** (in press) Dental development in living and fossil orangutans. *J. Hum. Evol.*
59. Raynal, J.P., Sbihi-Alaoui, F-Z., Mohib, A., El Graoui, M., Lefèvre, D., Texier, J-P., Geraads, D., Hublin, J-J., **Smith, T.**, Tafforeau, P., Zouak, M., Grün, R., Rhodes, E.J., Eggins, S., Daujeard, C., Fernandes, P., Gallotti, R., Hossini, S., Schwarcz, H.P., Queffelec, A. (in press) New dental human fossils in the Hominid Cave at Thomas Quarry I (Casablanca, Morocco), their environmental, archaeological and taphonomical context and their ICP-MS laser ablation direct dating. *Bull. d'Archéologie Marocaine*
58. Austin, C.*, **Smith, T.M.***, Farahani, R.M.Z.*, Hinde, K., Carter, E.A., Lee, J., Lay, P.A., Kennedy, B.J., Sarrafpour, B., Wright, R.J., Wright, R.O., Arora, M. (2016) Uncovering system-specific stress signatures in primate teeth with multimodal imaging. *Sci. Rep.* 5, 18802; doi: 10.1038/srep18802 * These authors contributed equally to this work.
57. **Smith, T.M.**, Boesch, C. (2015) Developmental defects in the teeth of three wild chimpanzees from the Tai forest. *Am. J. Phys. Anthropol.* 157:556–570.
56. Machanda, Z., Brazeau, N.F., Bernard, A.B., Donovan, R.M., Papakyrikos, A.M., Wrangham, R., **Smith, T.M.** (2015) Dental eruption in East African wild chimpanzees. *J. Hum. Evol.* 82:137-144.
55. **Smith, T.M.***, Tafforeau, P.*, Le Cabec, A., Bonnin, A., Houssaye, A., Pouech, J., Moggi-Cecchi, J., Manthi, F., Ward, C., Makaremi, M., Menter, C.G. (2015) Dental ontogeny in Pliocene and early Pleistocene hominins. *PLoS ONE* 10(2): e0118118.* These authors contributed equally to this work.
54. Kato, A., Tang, N., Borries C., Papakyrikos, A., Hinde, K., Miller, E., Kunimatsu, Y., Hirasaki, E., Shimizu, D., **Smith, T.M.** (2014) Intra- and interspecific variation in macaque molar enamel thickness. *Am. J. Phys. Anthropol.* 155:447–459.
53. Guatelli-Steinberg, D., Stinespring-Harris, A., Reid, D.J., Larsen, C.S., Hutchinson, D.L., **Smith, T.M.** (2014) Chronology of linear enamel hypoplasia formation in the Krapina Neanderthals. *PaleoAnthropol.* 2014:431–445.
52. Carter, K., Worthington, S., **Smith, T.M.** (2014) News and views: Non-metric dental traits and hominin phylogeny. *J. Hum. Evol.* 69:123-128.

51. **Smith, T.M.** (2013) Teeth and human life-history evolution. *Annu. Rev. Anthropol.* 42:191-208.
50. Austin, C.*, **Smith, T.M.***, Bradman, A., Hinde, K., Joannes-Boyau, R., Bishop, D., Hare, D.J., Doble, P., Eskenazi, B., Arora, M. (2013) Barium distributions in teeth reveal early life dietary transitions in primates. *Nature* 498:216-219. * These authors contributed equally to this work.
49. **Smith, T.M.**, Alemseged, Z. (2013) Reconstructing hominin life history. *Nature Education* 4:2. <http://www.nature.com/scitable/knowledge/library/reconstructing-hominin-life-history-96635644>
48. **Smith, T.M.**, Machanda, Z., Bernard, A.B., Donovan, R.M., Papakyrikos, A.M., Muller, M.N., Wrangham, R. (2013) First molar eruption, weaning, and life history in living wild chimpanzees. *Proc. Natl. Acad. Sci. USA* 110:2787-2791.
47. **Smith, T.M.**, Olejniczak, A.J., Zermeno, J.P., Tafforeau, P., Skinner, M.M., Hoffmann, A., Radovčić, J., Toussaint, M., Krszyski, R., Menter, C., Moggi-Cecchi, J., Glasmacher, U.A., Kullmer, O., Schrenk, F., Stringer, C., Hublin, J-J. (2012) Variation in enamel thickness within the genus *Homo*. *J. Hum. Evol.* 62:395-411.
46. Tafforeau, P., Zermeno, J.P., **Smith, T.M.** (2012) Tracking cellular-level enamel growth and structure in 4D with synchrotron imaging. *J. Hum. Evol.* 62:424-428.
45. **Smith, T.M.**, Kupczik, K., Machanda, Z., Skinner, M.M., Zermeno JP. (2012) Enamel thickness in Bornean and Sumatran orangutan dentitions. *Am. J. Phys. Anthropol.* 147:417-426.
44. Hublin J.J., Bailey S., Olejniczak A., **Smith T.**, Verna C., Sbihi-Alaoui F.Z., Zouak M. (2012) Dental evidence from the Aterian human populations of Morocco. In (Hublin, J-J., McPherron, S., Eds.) *Modern Origins: A North African Perspective*. Springer, Dordrecht, pp. 189-204.
43. Raynal, J.P., Sbihi-Alaoui, F-Z., Mohib, A., El Graoui, M., Lefèvre, D., Texier, J-P., Geraads, D., Hublin, J-J. **Smith, T.**, Tafforeau, P., Zouak, M., Grün, R., Rhodes, E.J., Eggins, S., Daujeard, C., Fernandes, P., Gallotti, R., Hossini, S. Schwarcz, H.P., Queffelec, A. (2011) Contextes et âge des nouveaux restes dentaires humains du Pléistocène moyen de la carrière Thomas I à Casablanca (Maroc). *Bull. Soc. Préhist. Française*. 108:645-669.
42. **Smith, T.M.**, Bacon, A-M., Demeter, F., Kullmer, O., Nguyen, K.T., Vos, J. de, Wei, W., Zermeno, J.P., Zhao, L. (2011) Dental tissue proportions in fossil orangutans from mainland Asia and Indonesia. *Hum. Origins Res.* 1:e1. (doi: 10.4081/hor.2011.e1)
41. **Smith, T.M.**, Reid, D.J., Olejniczak, A.J., Bailey, S., Glantz, M., Viola, B., Hublin, J-J. (2011) Dental development and age at death of a Middle Paleolithic juvenile hominin from Obi-Rakhmat Grotto, Uzbekistan. In (Condemi, S., Weniger, G.-C., Eds.) *Continuity and Discontinuity in the Peopling of Europe: One Hundred Fifty Years of Neanderthal Study*. Springer, Dordrecht, pp. 155-163.
40. **Smith, T.M.**, Tafforeau, P., Reid, D.J., Pouech, J., Lazzari, V., Zermeno, J.P., Guatelli-Steinberg, D., Olejniczak, A.J., Hoffman, A., Radovčić, J., Masrour, M., Toussaint, M., Stringer, C., Hublin, J-J. (2010) Dental evidence for ontogenetic differences between modern humans and Neanderthals. *Proc. Natl. Acad. Sci. USA* 107:20923-20928.
39. Feeney, R.N.M., Zermeno, J.P., Reid, D.J., Nakashima, S., Sano, H., Bahar, A., Hublin, J.J., **Smith, T.M.** (2010) Enamel thickness in Asian human canines and premolars. *Anthropol. Sci.* 118:191-198.
38. Lee, J.J-W., Morris, D., Constantino, P.J., Lucas, P.W., **Smith, T.M.**, Lawn, B.R. (2010) Properties of tooth enamel in great apes. *Acta Biomaterialia* 6:4560-4565.
37. Raynal, J.P., Sbihi-Alaoui, F-Z., Mohib, A., El Graoui, M., Lefèvre, D., Texier, J-P., Geraads, D., Hublin, J-J. **Smith, T.**, Tafforeau, P., Zouak, M., Grün, R., Rhodes, E.J., Eggins, S., Daujeard, C., Fernandes, P., Gallotti, R., Hossini, S., Queffelec, A. (2010) Hominid Cave at Thomas Quarry I (Casablanca, Morocco): Recent findings and their context. *Quatern. Int.* 223-224:369-382.
36. **Smith, T.M.**, Smith, B.H., Reid, D.J., Siedel, H., Vigilant, L., Hublin, J.J., Boesch, C. (2010) Dental development of the Tāi Forest chimpanzees revisited. *J. Hum. Evol.* 58:363-373.

35. Skinner, M.M., Evans, A., **Smith, T.**, Jernvall, J., Tafforeau, P., Kupczik, K., Olejniczak, A.J., Rosas A., Radović, J., Thackeray, J.F., Toussaint, M., Hublin, J.-J. (2010) Brief Communication: Contributions of enamel-dentine junction shape and enamel deposition to primate molar crown complexity. *Am. J. Phys. Anthropol.* 142:157-163.
34. **Smith, T.M.**, Reid, D.J. (2009) Temporal nature of periradicular bands ("striae periradicales") on mammalian tooth roots. In (Koppe, T., Meyer, G., Alt, K.W., Eds.) *Comparative Dental Morphology*. Karger, Basel, pp. 86-92.
33. Nielsen-Marsh, C.M., Stegemann, C., Hoffmann, R., **Smith, T.**, Feeney, R., Toussaint, M., Harvati, K., Panagopoulou, E., Hublin, J.-J., Richards, M.P. (2009) Extraction and sequencing of human and Neanderthal mature enamel proteins using MALDI-TOF/TOF MS. *J. Arch. Sci.* 36:1758-1763.
32. Richards, M., Grimes, V., Smith, C., **Smith, T.**, Harvati, K., Hublin, J.-J., Karkanas, P., Panagopoulou, E. (2009) Response to Nowell and Horstwood (2009) *J. Arch. Sci.* 36:1657-1658.
31. **Smith, T.M.**, Olejniczak, A.J., Kupczik, K., Lazzari, V., Vos, J., Kullmer, O., Schrenk, F., Hublin, J.-J., Jacob, T., Tafforeau, P. (2009) Taxonomic assessment of the Trinil molars using non-destructive 3D structural and developmental analysis. *PaleoAnthropol.* 2009:117-129.
30. **Smith, T.M.**, Harvati, K., Olejniczak, A.J., Reid, D.J., Hublin, J.-J., Panagopoulou, E. (2009) Brief Communication: Dental development and enamel thickness in the Lakonis Neanderthal molar. *Am. J. Phys. Anthropol.* 138:112-118.
29. **Smith, T.M.**, Tafforeau, P. (2008) New visions of dental tissue research: tooth development, chemistry, and structure. *Evol. Anthropol.* 17:213-226. (Featured as journal cover.)
28. Hublin, J.-J., Pääbo, S., Derevianko, A.P., Doronichev, V.B., Golovanova, L.V., Friess, M., Froment, A., Hoffmann, A., Kachache, N.E.J., Kullmer, O., Lordkipanidze, D., Moncel, M.-H., Potts, R., Radović, J., Rak, Y.Z., Richards, M., Méndez, J.R., Rosas, A., Schmauder, M., Schmitz, R.W., Semal, P., **Smith, T.**, Tafuri, M.A., Tattersall, I., Tournepiche, J.-F., Toussaint, M., Vassiliev, S., Vialet, A., White, T., Ziegler, R. (2008). Suggested guidelines for invasive sampling of hominid remains. *J. Hum. Evol.* 55:756-757.
27. Olejniczak, A.J., **Smith, T.M.**, Skinner, M.M., Grine, F.E., Feeney, R.N.M., Thackeray, F.J., Hublin, J.-J. (2008) Three-dimensional molar enamel distribution and thickness in *Australopithecus* and *Paranthropus*. *Biol. Lett.* 4:406-410.
26. Olejniczak, A.J., **Smith, T.M.**, Feeney, R.N.M., Macchiarelli, R., Mazurier, A., Bondioli, L., Rosas, A., Fortea, J., de la Rasilla, M., García-Taberner, A., Radović, J., Skinner, M.M., Toussaint, M., Hublin, J.-J. (2008) Dental tissue proportions and enamel thickness in Neanderthal and modern human molars. *J. Hum. Evol.* 55:12-23.
25. **Smith, T.M.**, Olejniczak, A.J., Reh, S., Reid, D.J., Hublin, J.-J. (2008) Brief Communication: Enamel thickness trends in the dental arcade of humans and chimpanzees. *Am. J. Phys. Anthropol.* 136:237-241.
24. Richards, M., Harvati, K., Grimes, V., Smith, C., **Smith, T.**, Hublin, J.-J., Karkanas, P., Panagopoulou, E. (2008) Strontium isotope evidence of Neanderthal mobility at the site of Lakonis, Greece using laser-ablation PIMMS. *J. Arch. Sci.* 35:1251-1256.
23. **Smith, T.M.** (2008) Incremental dental development: methods and applications in hominoid evolutionary studies. *J. Hum. Evol.* 54:205-224.
22. **Smith, T.M.**, Hublin, J.-J. (2008) Dental tissue studies: 2D and 3D insights into human evolution. *J. Hum. Evol.* 54:169-172.
21. Skinner, M.M., Wood, B., Boesch, C., Olejniczak, A.J., Rosas, A., **Smith, T.M.**, Hublin, J.-J. (2008) Dental trait expression at the enamel-dentine junction of lower molars in extant and fossil hominoids. *J. Hum. Evol.* 54:173-186.
20. Tafforeau, P.T., **Smith, T.M.** (2008) Nondestructive imaging of hominoid dental microstructure using phase contrast X-ray synchrotron microtomography. *J. Hum. Evol.* 54:272-278.

19. Olejniczak, A.J., **Smith, T.M.**, Wei, W., Potts, R., Ciochon, R., Kullmer, O., Schrenk, F., Hublin, J.-J. (2008) Molar enamel thickness and dentine horn height in *Gigantopithecus blacki*. *Am. J. Phys. Anthropol.* 135:85-91.
18. **Smith, T.M.**, Toussaint, M., Reid, D.J., Olejniczak, A.J., Hublin, J.-J. (2007) Rapid dental development in a Middle Paleolithic Belgian Neanderthal. *Proc. Natl. Acad. Sci. USA* 104:20220-20225.
17. **Smith, T.M.**, Reid, D.J., Dean, M.C., Olejniczak, A.J., Ferrell, R.J., Martin, L.B. (2007) New perspectives on chimpanzee and human dental development. In (Bailey, S. & Hublin, J.-J., Eds.) *Dental Perspectives on Human Evolution: State of the Art Research in Dental Paleoanthropology*. Springer, Dordrecht, pp. 177-192.
16. Olejniczak, A.J., Gilbert, C.C., Grine, F.E., Martin, L.B., **Smith, T.M.**, Ulhaas, L. (2007) Morphology of the enamel-dentine junction in sections of anthropoid primate maxillary molars. *J. Hum. Evol.* 53:292-301.
15. Mahoney, P., **Smith, T.M.**, Schwartz, G.T., Dean, C., Kelley, J. (2007) Molar crown formation in the late Miocene Asian hominoids, *Sivapithecus parvada* and *Sivapithecus indicus*. *J. Hum. Evol.* 53:61-68.
14. Olejniczak, A.J., Tafforeau, P., **Smith, T.M.**, Temming, H., Hublin, J.-J. (2007) Technical note: Compatibility of microtomographic imaging systems for dental measurements. *Am. J. Phys. Anthropol.* 134:130-134.
13. **Smith, T.M.**, Tafforeau, P.T., Reid, D.J., Grün, R., Eggins, S., Boutakiout, M., Hublin, J.-J. (2007) Earliest evidence of modern human life history in North African early *Homo sapiens*. *Proc. Natl. Acad. Sci. USA* 104:6128-6133.
12. **Smith, T.M.**, Reid, D.J., Dean, M.C., Olejniczak, A.J., Martin, L.B. (2007) Molar development in common chimpanzees (*Pan troglodytes*). *J. Hum. Evol.* 52:201-216.
11. **Smith, T.M.**, Olejniczak, A.J., Tafforeau, P., Reid, D.J., Grine, F.E., Hublin, J.-J. (2006) Molar crown thickness, volume, and development in South African Middle Stone Age humans. *S. Afri. J. Sci.* 102:513-517.
10. **Smith, T.M.**, Olejniczak, A.J., Reid, D.J., Ferrell, R.J., Hublin, J.-J. (2006) Modern human molar enamel thickness and enamel-dentine junction shape. *Arch. Oral Biol.* 51:974-995.
9. **Smith, T.M.**, Reid, D.J., Sirianni, J.E. (2006) The accuracy of histological assessments of dental development and age at death. *J. Anat.* 208:125-138.
8. **Smith, T.M.** (2006) Experimental determination of the periodicity of incremental features in enamel. *J. Anat.* 208:99-114. (Featured as journal cover.)
7. **Smith, T.M.** (2005) New evidence for the periodicity of incremental structures in enamel. In (Zadzinska, E., Ed.) *Current Trends in Dental Morphology Research*. University of Lodz Press, Lodz, pp. 445-456.
6. **Smith, T.M.**, Olejniczak, A.J., Martin, L.B., Reid, D.J. (2005) Variation in hominoid molar enamel thickness. *J. Hum. Evol.* 48:575-592.
5. **Smith, T.M.**, Martin, L.B., Reid, D.J., Bonis, L., Koufos, G.D. (2004) An examination of dental development in *Graecopithecus freybergi* (= *Ouranopithecus macedoniensis*). *J. Hum. Evol.* 46:551-577.
4. **Smith, T.M.** (2004) *Incremental Development of Primate Dental Enamel*. PhD Dissertation. Stony Brook University. Available on-line at: www.paleoanthro.org/dissertations.htm
3. Kelley, J., **Smith, T.M.** (2003) Age at first molar emergence in early Miocene *Afropithecus turkanensis* and life-history evolution in the Hominoidea. *J. Hum. Evol.* 44:307-329.
2. **Smith, T.M.**, Martin, L.B., Leakey, M.G. (2003) Enamel thickness, microstructure and development in *Afropithecus turkanensis*. *J. Hum. Evol.* 44:283-306.
1. Irwin M.T., **Smith, T.M.**, Wright, P.C. (2000) Census of three eastern rainforest sites north of Ranomafana National Park: preliminary results and implications for lemur conservation. *Lemur News* 5:20-22.

Additional Contributions to Edited Volumes and Scholarly Reports

- * **Smith, T.M.** (in press) Contributions of dental histology to archaeological science. In (Richards, M., Britton, K., Eds.) *Archaeological Science: An Introduction*. Cambridge University Press, New York.
- * **Smith, T.M.** (2015) Book Review: *Tooth Development in Human Evolution and Bioarchaeology* by Simon Hillson (2014). *Quarterly Rev. Biol.* 90:226-227.
- * **Smith, T.M.**, Reid, D.J., Olejniczak, A.J., Tafforeau, P., Hublin, J.-J., Toussaint, M. (2014) Dental development in and age at death of the Scladina 1-4A juvenile Neanderthal. In (Toussaint, M., Bonjean, D. Eds.) *The Scladina I-4A Juvenile Neanderthal (Andenne, Belgium) Palaeoanthropology and Context*. Études et Recherches Archéologiques de l' Université de Liège, Liège. pp. 155-166.
- * **Smith, T.M.**, Guatelli-Steinberg, D. (2011) Developmental variation of the primate dentition: The 2011 AAPA symposium in honor of Don Reid. *Evol. Anthropol.* 20:161-163.
- * **Smith, T.M.** (2011) Biological rhythms in teeth reveal developmental differences between modern humans and Neanderthals. *Symbols* (Peabody Museum) Spring 2011:12-15.
- * Dental Morphology Topic Editor (2011) *Wiley-Blackwell Encyclopedia of Human Evolution*. Primary Editor: Bernard Wood.
- * **Smith, T.M.**, Tafforeau, P. (2010) Synchrotron reveals human children outpaced Neanderthals by slowing down. *ESRF Highlights* 2010:117-118.
- * Contributor (2010) *3-D Tooth Atlas*, versions 5 & 6, Brown and Herbranson Imaging.
- * **Smith, T.M.** (2009) Book Review: *Technique and Application in Dental Anthropology*, J Irish & G Nelson, Eds. (2009). *Am. J. Phys. Anthropol.* 139:607-608.
- * Guest Associate Editor (2008) Dental Tissues Special Issue of *Journal of Human Evolution*, vol. 54.
- * **Smith, T.M.**, Tafforeau, P. (2007) Phase-contrast X-ray imaging demonstrates earliest occurrence of the modern human growth and development pattern. *ESRF Highlights* 2007:115-117.

Presentations at Professional Meetings (Published Abstracts Indicated)

83. **Smith, T.M.**, Austin, C., Hinde, K., Arora, M. (2016) Cyclical nursing patterns in wild orangutans recorded in teeth. To be presented at the 85th Annual Meeting of the American Association of Physical Anthropologists, Atlanta, GA, April 12-16, 2016.
82. Green, D.R., Colman, A.S., Green, G.M., Bidlack, F.B., Tafforeau, P., **Smith, T.M.** (2016) Experimental water switch in sheep improves models for seasonal climate reconstruction. To be presented at the 85th Annual Meeting of the American Association of Physical Anthropologists, Atlanta, GA, April 12-16, 2016.
81. Green, D.R., Green, G.M., Colman, A.S., Tafforeau, P., **Smith, T.M.** (2015) Synchrotron x-ray imaging and MCMC support seasonal climate reconstruction. Presented at the Latest Methods in Reconstructing Cenozoic Terrestrial Environments and Ecological Communities Symposium, Cleveland Museum of Natural History, Cleveland, OH, September 10-12, 2015.
80. **Smith, T.M.**, Russell, B. (2015) How women in STEM fields experience and influence academic culture. NSF ADVANCE/GSE Program Workshop, Baltimore, MD, May 31-June 2, 2106.
79. **Smith, T.M.**, Hinde, K., Austin, C., Arora, M. (2015) Dental perspectives on weaning in living and fossil primates. Presented at the 84th Annual Meeting of the American Association of Physical Anthropologists, St. Louis, MO, March 25-29, 2015. (*Am. J. Phys. Anthropol.* Suppl. 60:293)
78. Green, D.R., Green, G.M., Colman, A.S., Tafforeau, P., **Smith, T.M.** (2015) Synchrotron x-ray imaging and MCMC support seasonal climate reconstruction. Presented at the 84th Annual Meeting of the American

Association of Physical Anthropologists, St. Louis, MO, March 25-29, 2015. (*Am. J. Phys. Anthropol.* Suppl. 60:152)

77. Machanda, Z., **Smith, T.M.**, Thompson, M.E., Muller, M.N., Wrangham, R. (2014) Growing up chimpanzee: integrating developmental trajectories among wild *Pan troglodytes*. Presented at the 1st Annual Meeting of the Nor'Eastern Primate Ecology, Evolution, and Behavior Group, Rutgers, New Jersey, November 7-8, 2014.
76. **Smith, T.M.**, Hinde, K., Austin, C., Arora, M. (2014) Dental perspectives on the weaning process in living primates. Presented at the 1st Annual Meeting of the Nor'Eastern Primate Ecology, Evolution, and Behavior Group, Rutgers, New Jersey, November 7-8, 2014.
75. Le Cabec, A., Tafforeau, P., **Smith, T.M.**, Carlson, K., Berger, L. (2014) Age-at-death and dental developmental pattern of the *Australopithecus sediba* juvenile MH1 determined from synchrotron virtual paleohistology. Presented at the 4th Annual Meeting of the European Society for the Study of Human Evolution, Florence, Italy, September 18-20, 2014.
74. Kelley, J., Schwartz, G.T., **Smith, T.M.** (2014) Variation in age at M1 emergence and life history in wild chimpanzees. Presented at the 16th International Symposium on Dental Morphology, Zagreb, Croatia, August 26-30, 2014. (*Bull. Int. Assoc. Paleodontology*. 2014 8:153)
73. **Smith, T.M.**, Machanda, Z., Vogel, E. (2014) Can we infer diet from primate enamel thickness? Presented at the 25th Congress of the International Primatological Society, Hanoi, Vietnam, August 11-16, 2014.
72. **Smith, T.M.**, Boesch, C., Sirianni, J.E., Hinde, K. (2014) Developmental disruptions in the teeth of primates of known histories. Presented at the 23rd Annual Meeting of the Paleoanthropology Society, Calgary, Canada, April 8-9, 2014. (*PaleoAnthropol.* 2014:A23)
71. **Smith, T.M.**, Le Cabec, A., Bonnin, A., Houssaye, A., Pouech, J., Moggi-Cecchi, J., Menter, C.G., Manthi, F., Ward, C., Tafforeau, P. (2014) Resolving Pliocene and Pleistocene hominin dental ontogeny with synchrotron virtual histology. Presented at the 83rd Annual Meeting of the American Association of Physical Anthropologists, Calgary, Canada, April 9-12, 2014. (*Am. J. Phys. Anthropol.* Suppl. 58:243)
70. Tang, N., Jeffrey, N., Graham, P., Worthington, S., Kato, A., Sirianni, J., Lieberman, D., Tafforeau, P., **Smith, T.M.** (2014) The ontogeny of human and macaque prenatal brain and tooth growth. Presented at the 83rd Annual Meeting of the American Association of Physical Anthropologists, Calgary, Canada, April 9-12, 2014. (*Am. J. Phys. Anthropol.* Suppl. 58:251-252)
69. Le Cabec, A., Tafforeau, P., **Smith, T.M.**, Carlson, K., Berger, L. (2014) Dental development of the *Australopithecus sediba* juvenile MH1 determined from synchrotron virtual paleohistology. Presented at the 83rd Annual Meeting of the American Association of Physical Anthropologists, Calgary, Canada, April 9-12, 2014. (*Am. J. Phys. Anthropol.* Suppl. 58:166)
68. Kelley, J., Schwartz, G.T., **Smith, T.M.** (2014) Variation in age at M1 emergence and life history in wild chimpanzees. Presented at the 83rd Annual Meeting of the American Association of Physical Anthropologists, Calgary, Canada, April 9-12, 2014. (*Am. J. Phys. Anthropol.* Suppl. 58:156)
67. Westaway, K.E., Due Awe, R., Morwood, M.J., Zhao, J., Bergh, G.D., **Smith, T.**, Vos, J., Dubiantono, T. (2014) Another piece in the puzzle of human arrival in Southeast Asia? Evidence from Dubois's rainforest breccia in Sumatra. Presented at the 20th Congress of the Indo-Pacific Prehistory Association, January 12-18, 2014.
66. Le Cabec, A., **Smith, T.M.**, Tafforeau, P. (2013) New synchrotron-based visualization technique for incremental growth lines and stresses in fossil teeth. Presented at the 3rd Annual Meeting of the European Society for the Study of Human Evolution, Vienna, Austria, September 20-21, 2013.
65. Le Cabec, A., Tafforeau, P., **Smith, T.M.** (2013) Advances in virtual dental histology for palaeoanthropology using multi-scale propagation phase contrast X-ray synchrotron microtomography. Presented at the 10th International Congress of Vertebrate Morphology, Barcelona, Spain, July 8-12, 2013.

64. Tafforeau, P., **Smith, T.M.** (2013) Synchrotron virtual palaeohistology: accessing the archives of hominin dental development and life history non-destructively. Presented at the 11th International Conference on Tooth Morphogenesis and Differentiation, La Londe les Maures, France, May 26-31, 2013.
63. Le Cabec, A., **Smith, T.M.**, Bonnin, A., Tafforeau, P. (2013) New synchrotron-based visualization technique for fine incremental structures and stresses in teeth. Presented at the 11th International Conference on Tooth Morphogenesis and Differentiation, La Londe les Maures, France, May 26-31, 2013.
62. **Smith, T.M.**, Machanda, Z., Bernard, A., Donovan, R., Papakyrikos, A.M., Muller, M.N., Wrangham, R. (2013) First molar eruption and life history in living wild chimpanzees. Presented at the 82nd Annual Meeting of the American Association of Physical Anthropologists, Knoxville, TN, April 10-13, 2013. (*Am. J. Phys. Anthropol.* Suppl. 56:258)
61. Kato, A., Tang, N., Papakyrikos, A., Hinde, K., Miller, E., Kunimatsu, Y., Hirasaki, E., Shimizu, D., **Smith, T.M.** (2013). Molar enamel thickness in four macaque species. Presented at the 82nd Annual Meeting of the American Association of Physical Anthropologists, Knoxville, TN, April 10-13, 2013. (*Am. J. Phys. Anthropol.* Suppl. 56:163)
60. Tang, N., Kato, A., Hinde, K., Miller, E., **Smith, T.M.** (2013) Molar development and life history in four macaque species. Presented at the 82nd Annual Meeting of the American Association of Physical Anthropologists, Knoxville, TN, April 10-13, 2013. (*Am. J. Phys. Anthropol.* Suppl. 56:268-269)
59. Green, D., **Smith, T.M.**, Tafforeau, P. (2013) Microtomographic assessment of mineralization patterns to inform isotope paleoenvironment reconstruction. Presented at the 82nd Annual Meeting of the American Association of Physical Anthropologists, Knoxville, TN, April 10-13, 2013. (*Am. J. Phys. Anthropol.* Suppl. 56:135-136)
58. Carter, K.E., Worthington, S., **Smith, T.M.** (2013) The evolution of third molar agenesis. Presented at the 82nd Annual Meeting of the American Association of Physical Anthropologists, Knoxville, TN, April 10-13, 2013. (*Am. J. Phys. Anthropol.* Suppl. 56:95) Won The Albert A. Dahlberg Student Prize.
57. Papakyrikos, A., Wen, Y., Austin, C., Kato, A., Tang, N., Arora, M., Wang, X.-P., **Smith, T.M.** (2013) Incremental growth lines in melatonin-deficient mice. Presented at the 82nd Annual Meeting of the American Association of Physical Anthropologists, Knoxville, TN, April 10-13, 2013. (*Am. J. Phys. Anthropol.* Suppl. 56:215)
56. **Smith, T.M.**, Donovan, R., Machanda, Z., Papakyrikos, A.M., Wrangham, R. (2012) A primate perspective on the evolution of human life history. Presented at the 111th American Anthropological Association Meeting, San Francisco, CA, November 14-18, 2012. (Invited Contribution)
55. Kato, A., Papakyrikos, A., Tang, N., Kunimatsu, Y., Hinde, K., Miller, E., Ohno, N., **Smith, T.** (2012) Molar enamel thickness in macaque species. Presented at the 66th Annual Meeting of the Anthropological Science of Nippon, Kanagawa, Japan, November 2-4, 2012.
54. **Smith, T.M.**, Houssaye, A., Hublin, J.-J., Kato, A., Kullmer, O., Maire, E., Olejniczak, A.J., Schrenk, F., Tafforeau, P., Vos, J. de, Zermeno, J.P. (2012) Reassessing enigmatic Asian hominoid dental remains. Presented at the 81st Annual Meeting of the American Association of Physical Anthropologists, Portland, OR, April 11-14, 2012. (*Am. J. Phys. Anthropol.* Suppl. 54:273)
53. Stinespring Harris, A., Guatelli-Steinberg, D., Reid, D.J., Larsen, C.S., Hutchinson, D., **Smith, T.M.** (2012) A method to estimate the timing of linear enamel hypoplasia for Neandertals. Presented at the 81st Annual Meeting of the American Association of Physical Anthropologists, Portland, OR, April 11-14, 2012. (*Am. J. Phys. Anthropol.* Suppl. 54:278)
52. Wen, Y., Katebi, N., Zhao, J., Liu, M., Kato, A., **Smith, T.**, Cox, K., Amendt, B., Camargo, F., Martin, J., Bidlack, F., Bartlett, J., Wang, X.-P. (2012) Where and how to make extra teeth. Presented at the 2012 Annual Meeting of the American Association of Dental Research, Tampa, FL, March 21-24, 2012.
51. Wen, Y., Katebi, N., Zhao, J., Liu, M., Kato, A., **Smith, T.**, Cox, K., Amendt, B., Camargo, F., Martin, J., Bidlack, F., Bartlett, J., Wang, X.-P. (2012) Hippo signaling and tooth development. Presented at the 2012

Gordon Research Conference on Craniofacial Morphogenesis & Tissue Regeneration, Ventura, CA, March 18-23, 2012.

50. **Smith, T.M.**, Zermeno, J.P., Green, D.R., Reid, D.J., Tafforeau, P. (2011) Daily secretion rates, prism paths, and cuspal formation times in hominoid molars. Presented at the 15th International Symposium on Dental Morphology, Newcastle, UK, August 24-27, 2011. (*Bull. Int. Assoc. Paleodontology*. 7:129)
49. Tafforeau, P., Houssaye, A., Zermeno, J.P., Pouech, J., **Smith, T.M.** (2011) Revealing dental microstructure and development in fossil hominids non-destructively using synchrotron virtual histology. Presented at the International Symposium on Paleohistology, Barcelona, Spain, July 18-20, 2011.
48. Tafforeau, P., **Smith, T.M.** (2011) The ESRF virtual database: A new resource for paleoanthropologists. Presented at the Annual Meeting of the Paleoanthropology Society, Minneapolis, MN, April 12-13, 2011. (*PaleoAnthropol.* 2011:A37.)
47. **Smith, T.M.**, Tafforeau, P., Reid, D.J., Pouech, J., Lazzari, V., Zermeno, J.P., Guatelli-Steinberg, D., Olejniczak, A.J., Hoffman, A., Radovčić, J., Masrour, M., Toussaint, M., Stringer, C., Hublin, J.-J. (2011) Histological evidence for ontogenetic differences between modern human and Neanderthal dentitions. Presented at the 80th Annual Meeting of the American Association of Physical Anthropologists, Minnesota, MN, April 13-16, 2011. (*Am. J. Phys. Anthropol.* Suppl. 52:278-279)
46. Tafforeau, P., Pouech, J., **Smith, T.M.**, Moggi-Cecchi, J., Menter, C.G. (2011) Dental development in juvenile fossil hominins from Drimolen, South Africa using synchrotron virtual histology. Presented at the 80th Annual Meeting of the American Association of Physical Anthropologists, Minnesota, MN, April 13-16, 2011. (*Am. J. Phys. Anthropol.* Suppl. 52:289)
45. Green, D.R., Glowacka, H., Schwartz, G.T., Reid, D.J., Martin, L.B., **Smith, T.M.** (2011) Developmental variation in great ape molar crowns. Presented at the 80th Annual Meeting of the American Association of Physical Anthropologists, Minnesota, MN, April 13-16, 2011. (*Am. J. Phys. Anthropol.* Suppl. 52:148-149)
44. Tafforeau, P., **Smith, T.M.**, Reid, D.J., Pouech, J., Lazzari, V., Zermeno, J.P., Guatelli-Steinberg, D., Olejniczak, A.J., Hoffman, A., Radovčić, J., Masrour, M., Toussaint, M., Stringer, C., Hublin, J.-J. (2011) Différences ontogénétiques entre les dentitions des humains modernes et des Neanderthaliens révélées par histologie virtuelle dentaire synchrotron. Presented at the Journées de la Société Paléoanthropologique, Paris, France, January 26-28, 2011.
43. **Smith, T.M.** (2010) Biological rhythms in dental hard tissues. Presented at the 2010 Northeast Regional Meeting of the Division of Vertebrate Morphology of the Society for Integrative and Comparative Biology, Cambridge, MA, October 16, 2010.
42. **Smith, T.M.** (2010) Insights from the inside: what teeth tell us about great ape evolution. Presented at the 23rd International Primatological Society Congress, Kyoto, Japan, September 12-18, 2010.
41. **Smith, T.M.**, Zermeno, J.P., Pouech, J., Tafforeau, P., Olejniczak, A.J., Reid, D.J., Eastham, L., Hublin, J.-J., Kordos, L., Begun, D. (2010) Enamel thickness and tooth development in a subadult *Dryopithecus branchoi* (*Rudapithecus hungaricus*) individual. Presented at the 79th Annual Meeting of the American Association of Physical Anthropologists, Albuquerque, NM, April 14-17, 2012. (*Am. J. Phys. Anthropol.* Suppl. 50:220)
40. Zermeno, J.P., **Smith, T.M.**, Tafforeau, P. (2010) Enamel prisms revealed in three-dimensions by phase contrast synchrotron microtomography. Presented at the 79th Annual Meeting of the American Association of Physical Anthropologists, Albuquerque, NM, April 14-17, 2012. (*Am. J. Phys. Anthropol.* Suppl. 50:250-251)
39. MacLatchy, L., Rossie, J., **Smith, T.M.**, Tafforeau, P. (2010) Evidence for dietary niche separation in the Miocene hominoids *Morotopithecus* and *Afropithecus*. Presented at the 79th Annual Meeting of the American Association of Physical Anthropologists, Albuquerque, NM, April 14-17, 2010. (*Am. J. Phys. Anthropol.* Suppl. 50:60)
38. Zink, K., Siders, A., **Smith, T.**,* Lieberman, D. (2010) Bone and dental responses to masticatory loading: a shared regulatory mechanism? Presented at the 79th Annual Meeting of the American Association of Physical

Anthropologists, Albuquerque, NM, April 14-17, 2010. (*Am. J. Phys. Anthropol.* Suppl. 50:251) *Erroneously omitted from author list in program.

37. Constantino, P.J., Lee, J. J.-W., Morris, D., Hartstone-Rose, A., **Smith, T.M.**, Lucas, P.W., Lawn, B.R. (2010) Extracting ecological information from the mechanical properties and structure of primate teeth. Presented at the 79th Annual Meeting of the American Association of Physical Anthropologists, Albuquerque, NM, April 14-17, 2010. (*Am. J. Phys. Anthropol.* Suppl. 50:84)
36. **Smith, T.M.**, Tafforeau, P. (2009) Paleontological applications of synchrotron imaging with special insights into human evolution. Presented at the General Congress of the French Physics Society, Palaiseau, France, July 6-10, 2009.
35. **Smith, T.M.**, Smith, B.H., Boesch, C. (2009) Dental development in the Taï forest chimpanzees reappraised. Presented at the 78th Annual Meeting of the American Association of Physical Anthropologists, Chicago, IL, April 1-4, 2009. (*Am. J. Phys. Anthropol.* Suppl. 48:377).
34. Tafforeau, P., Hublin, J.-J., **Smith, T.M.** (2009) Hominin dental structure and development revealed non-destructively by multi-scale synchrotron imaging. Presented at the 78th Annual Meeting of the American Association of Physical Anthropologists, Chicago, IL, April 1-4, 2009. (*Am. J. Phys. Anthropol.* Suppl. 48:157-158.).
33. Constantino, P.J., Lee, J.J.-W., **Smith, T.M.**, Lucas, P.W., Lawn, B.R. (2009) Mechanical properties of great ape tooth enamel. Presented at the 78th Annual Meeting of the American Association of Physical Anthropologists, Chicago, IL, April 1-4, 2009. (*Am. J. Phys. Anthropol.* Suppl. 48:391-392.).
32. Raynal, J.P., Sbihi-Alaoui, F-Z., Mohib, A., El Graoui, M., Lefèvre, D., Texier, J-P., Geraads, D., Hublin, J-J. **Smith, T.**, Tafforeau, P., Zouak, M., Grün, R., Rhodes, E.J., Eggins, S., Daujard, C., Fernandes, P., Gallotti, R., Hossini, S., Queffelec, A. (2008) Hominid Cave at Thomas Quarry I (Casablanca, Morocco): recent findings and their context. Presented at the International Congress: The oldest human expansions in Eurasia - favouring and limiting factors, Paris, France, November 26-28, 2008.
31. **Smith, T.M.** (2008) Life and death in juvenile hominins from the Middle Paleolithic. Presented at the 14th International Symposium on Dental Morphology, Greifswald, Germany, August 26-30, 2008.
30. **Smith, T.M.**, Reid, D.J. (2008) The temporal nature of periradicular bands ("*Striae Periradicales*") on mammalian tooth roots. Presented at the 14th International Symposium on Dental Morphology, Greifswald, Germany, August 26-30, 2008.
29. **Smith, T.M.**, Harvati, K., Olejniczak, A.J., Reid, D.J., Hublin, J.-J., Panagopoulou, E. (2008) Dental development and enamel thickness in the Neanderthal molar from Lakonis, Greece. Presented at the 77th Annual Meeting of the American Association of Physical Anthropologists, Columbus, OH, April 7-13, 2008. (*Am. J. Phys. Anthropol.* Suppl. 46:197-198).
28. Reid, D.J., **Smith, T.M.**, Hublin, J.-J. (2008) Dental development and enamel thickness in northwestern African modern humans. Presented at the 77th Annual Meeting of the American Association of Physical Anthropologists, Columbus, OH, April 7-13, 2008. (*Am. J. Phys. Anthropol.* Suppl. 46:179).
27. **Smith, T.M.**, Hublin, J.-J., Tafforeau, P. (2008) Synchrotron investigations of fossil hominin dental structure and development. Presented at the Annual Meeting of the Paleoanthropology Society, Vancouver, Canada, March 25-26, 2008. (*PaleoAnthropol.* A30).
26. Olejniczak, A.J., **Smith, T.M.**, Glasmacher, U.A., Hublin, J.-J. (2007) High-resolution microCT analysis of the Mauer mandible. Proceedings of the 7th Congress of the German Anthropological Association. Freiburg im Breisgau, Germany, September 11, 2007.
25. **Smith, T.M.** (2007) New approaches to understanding tooth development and life history in hominoid evolution. Plenary lecture presented at the 2nd Congress of the European Federation for Primatology, Prague, Czech Republic, September 3-7, 2007.

24. Hublin, J.J., Bailey, S., Olejniczak, A., **Smith, T.**, Verna, C., Sbihi-Alaoui, F.Z., Zouak, M. (2007) Dental evidence from the Aterian human populations of Morocco. Presented at the conference: Modern Origins: A North African Perspective, Leipzig, Germany, August 30-September 1, 2007.
23. **Smith, T.M.**, Olejniczak, A.J., Reid, D.J., Guatelli-Steinberg, D., Hoffmann, A., Hublin, J.-J. (2007) Le Moustier 1 dental development and enamel thickness. Presented at the International Congress of Vertebrate Morphology, Paris, France, July 16-21, 2007. (*J. Morph.* 268:1135-1136)
22. **Smith, T.M.**, Olejniczak, A.J., Reid, D.J., Hublin, J.-J., Toussaint, M. (2007) Dental development, enamel thickness, and age at death in the Scladina Cave Belgian Neanderthal. Presented at the Annual Meeting of the Paleoanthropology Society, Philadelphia, PA, March 27-28, 2007. (*PaleoAnthropol.* A30)
21. Olejniczak, A.J., **Smith, T.M.**, Skinner, M.M., Grine, F.E., Feeney, R.N.M., Thackeray, J.F., Hublin, J.-J. (2007) Molar tissue volumes and enamel thickness in South African fossil hominins. Presented at the Annual Meeting of the Paleoanthropology Society, Philadelphia, PA, March 27-28, 2007. (*PaleoAnthropol.* A21-22)
20. **Smith, T.M.** (2007) Molar crown development in wild orangutans. Presented at the 76th Annual Meeting of the American Association of Physical Anthropologists, Philadelphia, PA, March 29-April 1, 2007. (*Am. J. Phys. Anthropol.* Suppl. 44:222)
19. Olejniczak, A.J., **Smith, T.M.**, Wei, W., Potts, R., Ciochon, R., Kullmer, O., Schrenk, F., Hublin, J.-J. (2007) Microtomographic investigation of enamel thickness and enamel-dentine junction shape in *Gigantopithecus blacki*. Presented at the 76th Annual Meeting of the American Association of Physical Anthropologists, Philadelphia, PA, March 29-April 1, 2007. (Erroneously omitted from *Am. J. Phys. Anthropol.* Suppl. 44)
18. Skinner, M.M., Olejniczak, A.J., Rosas, A., **Smith, T.M.**, Wood, B.A., Hublin, J.-J. (2007) Dentine crown expression of discrete dental traits on extant hominoid and fossil hominin lower molars. Presented at the 76th Annual Meeting of the American Association of Physical Anthropologists, Philadelphia, PA, March 29-April 1, 2007. (*Am. J. Phys. Anthropol.* Suppl. 44:220) Won Albert A. Dahlberg Student Prize.
17. **Smith, T.M.**, Tafforeau, P., Reid, D.J., Boutakiout, M., Hublin, J.-J. (2006) Crown formation and age at death in the juvenile hominin from Jebel Irhoud, Morocco. Presented at the Dental Tissues Workshop: 2D and 3D Insights into Human Evolution, Leipzig, Germany, September 20-23, 2006.
16. **Smith, T.M.**, Reid, D.J., Olejniczak, A.J., Bailey, S., Glantz, M., Viola, B., Hublin, J.-J. (2006) Dental development and age at death in a Middle Paleolithic juvenile hominin from Obi-Rakhmat Grotto, Uzbekistan. Presented at the 150 Years of Neanderthal Discoveries International Congress, Bonn, Germany, July 21-26, 2006. (*Terra Nostra* 2:136.)
15. Olejniczak, A.J., **Smith, T.M.**, Macchiarelli, R., Mazurier, A., Bondioli, L., Rosas, A., Fortea, J., de la Rasilla, M., García-Taberner, A., Skinner, M.M., Hublin, J.-J. (2006) Enamel volume and thickness in Neanderthal molars: a microtomographic investigation. Presented at the 150 Years of Neanderthal Discoveries International Congress, Bonn, Germany, July 21-26, 2006. (*Terra Nostra* 2:128-129.)
14. **Smith, T.M.**, Olejniczak, A.J., Tafforeau, P., Grine, F.E., Hublin, J.-J. (2006) High resolution microtomography of Middle Stone Age human molars from South Africa. Presented at the 75th Annual Meeting of the American Association of Physical Anthropologists, Anchorage, AK, March 8-11, 2006. (*Am. J. Phys. Anthropol.* Suppl. 42:140-141.)
13. Olejniczak, A.J., **Smith, T.M.**, Tafforeau, P., Temming, H., Hublin, J.-J. (2006) A comparison of microtomographic systems for the analysis of dental tissues. Presented at the 75th Annual Meeting of the American Association of Physical Anthropologists, Anchorage, AK, March 8-11, 2006. (*Am. J. Phys. Anthropol.* Suppl. 42:167.)
12. **Smith, T.M.**, Olejniczak, A.J., Tafforeau, P., Hublin, J.-J. (2005) New approaches to understanding enamel thickness and development in human and primate evolution. Presented at the International Symposium on Migration and Evolution of Early Humans in the Old World, Baise, Guangxi Zhuang Autonomous Region, China, December 5-9, 2009.

11. **Smith, T.M.** (2005) New evidence for the periodicity of incremental structures in enamel. Presented at the 13th International Dental Symposium on Dental Morphology, Lodz, Poland, August 24-27, 2005.
10. **Smith, T.M.**, Reid, D.J., Dean, M.C., Olejniczak, A.J., Ferrell, R.J., Martin, L.B. (2005) New perspectives on chimpanzee and human dental development. Presented at the Max Planck Institute for Evolutionary Anthropology Dental Paleoanthropology Conference, Leipzig, Germany, May 26-28, 2005.
9. **Smith, T.M.**, Olejniczak, A.J., Martin, L.B., Reid, D.J., Dean, M.C. (2005) Molar cusp formation in common chimpanzees (*Pan troglodytes*). Presented at the 74th Annual Meeting of the American Association of Physical Anthropologists, Milwaukee, Wisconsin, April 6-9, 2005. (*Am. J. Phys. Anthropol.* Suppl. 40:198.)
8. **Smith, T.M.**, Benes, S., Martin, L.B. (2004) Relative enamel thickness in a large sample of *Pan* and *Pongo* molars. Presented at the 73rd Annual Meeting of the American Association of Physical Anthropologists, Tampa, FL, April 14-17, 2004. (*Am. J. Phys. Anthropol.* Suppl. 38:185.)
7. **Smith, T.M.**, Dean, M.C., Kelley, J., Martin, L.B., Reid, D.J., Schwartz, G.T. (2003) Molar crown formation in Miocene hominoids: a preliminary synthesis. Presented at the 72nd Annual Meeting of the American Association of Physical Anthropologists, Tempe, AZ, April 23-26, 2003. (*Am. J. Phys. Anthropol.* Suppl. 36:196.)
6. Johnson, S.E., Irwin, M.T., Wright, P.C., Arrigo-Nelson, S., Grassi, C., Samonds, K.E., **Smith, T.M.** (2003) Natural and anthropomorphic influences on lemur population structure in southeastern Madagascar. Presented at the 72nd Annual Meeting of the American Association of Physical Anthropologists, Tempe, AZ, April 23-26, 2003. (*Am. J. Phys. Anthropol.* Suppl. 36:123.)
5. **Smith, T.M.**, Martin, L.B., Sirianni, J.E. (2002) Incremental features of pre- and postnatal enamel microstructure in pigtailed macaques (*Macaca nemestrina*). Presented at the 71st Annual Meeting of the American Association of Physical Anthropologists, Buffalo, NY, April 10-14, 2002. (*Am. J. Phys. Anthropol.* Suppl. 34:144.)
4. **Smith, T.M.**, Martin, L.B., de Bonis, L., Koufos, G.D. (2001) Dental development in *Graecopithecus freybergi* (*Ouranopithecus macedoniensis*). Presented at the 70th Annual Meeting of the American Association of Physical Anthropologists, Kansas City, MO, March 28-31, 2001. (*Am. J. Phys. Anthropol.* Suppl. 32:140.)
3. **Smith, T.M.**, Martin, L.B. (2000) A re-evaluation of enamel thickness and development in *Afropithecus turkanensis*. Presented at the 69th Annual Meeting of the American Association of Physical Anthropologists, San Antonio, TX, April 10-15, 2000. (*Am. J. Phys. Anthropol.* Suppl. 30:285-286.)
2. **Smith, T.M.**, Iovine, T., Anemone, R.L., Nachman, B. (1997) Vertebrate paleontology of the great divide basin, SW Wyoming: field and lab studies. Presented at the 37th Annual Meeting of the Northeastern Anthropological Association, Quebec, Canada, April 11-13, 1997.
1. **Smith, T.M.** (1997) Scanning electron microscope investigations of fossil and living mammalian dentitions. Presented at the Tri-Beta Biological Honors Society Regional Meetings, Geneseo, NY, March 15, 1997.

Invited Addresses and Lectures

- * UC Davis Postdoc Entrepreneurship and Career Group, University of California, Davis, Davis, CA, 2016.
- * Expanding Potential Workshop, University of California, Berkeley, Berkeley, CA, 2016.
- * University of Washington Quaternary Research Center Distinguished Lecture, Seattle, WA, 2015.
- * Harvard Museums of Science and Culture Evolution Matters Series, Cambridge, MA, 2015.
- * Harvard University, Human Evolutionary Biology Colloquium Series, Cambridge, MA, 2014.
- * California Academy of Sciences, Hearst Symposium on Being Human, San Francisco, CA, 2014.
- * American Association of Physical Anthropologists' Annual Meeting, Invited Symposium, Calgary, Canada, 2014.
- * Duke University, Evolutionary Anthropology Seminar Series, Durham, NC, 2014.
- * Duke University, Women in Science and Engineering Program, Durham, NC, 2014.
- * University of California Berkeley, Primate Biology Seminar Series, Berkeley, CA, 2013.
- * University of Colorado Boulder, Biological Anthropology Seminar Series, Boulder, CO, 2013.
- * University of Michigan, Anthropology Department Seminar Series, Ann Arbor, MI, 2013.
- * Radcliffe Institute for Advance Study, Fellows Lecture, Cambridge, MA, 2013.
- * Forsyth Institute, Institutional Seminar, Cambridge, MA, 2013.

- * American Association of Anthropologists' Annual Meeting, Invited Symposium, San Francisco, CA, 2012.
- * SICB Division of Vertebrate Morphology Regional Meeting, Big Picture Talk, Amherst, MA, 2012.
- * University of Saskatchewan, Department of Anatomy and Cell Biology Seminar Series, Saskatoon, Canada, 2012.
- * Yale University, Anthropology Department Seminar Series, New Haven, CT, 2012.
- * Harvard School of Dental Medicine, Basic Sciences and Clinical Science Forum, Boston, MA, 2011.
- * Gordon Research Conference on Bones and Teeth, Plenary Address, Les Diablerets, Switzerland, 2011.
- * Hamilton-Wenham Regional High School, Research Seminar, Hamilton, MA, 2011.
- * New England Society for Microscopy's Annual Meeting, Plenary Address, Woods Hole, MA, 2011.
- * University of New Mexico, Interdisciplinary Biological & Biomedical Science Seminar, Albuquerque, NM, 2011.
- * University of Massachusetts at Amherst, Organismic & Evolutionary Biology Seminar, Amherst, MA, 2011.
- * Harvard Pre-Dental Society's First Annual Research Conference, Research Seminar, Cambridge, MA, 2011.
- * California Academy of Sciences, Bioforum Invited Symposium, San Francisco, CA, 2010.
- * University of Massachusetts at Amherst, Physical Anthropology Seminar Series, Amherst, MA, 2010.
- * Harvard Natural History Museum, Research Seminar, Cambridge, MA, 2010.
- * European Synchrotron Radiation Facility (ESRF), Invited Symposium, Grenoble, France, 2009.
- * General Congress of the French Physics Society, Plenary Address, Paris, France, 2009.
- * Harvard University, Concord Field Station Seminar Series, Cambridge, MA, 2008.
- * University of the Witwatersrand, School of Anatomical Sciences, Johannesburg, South Africa, 2008.
- * ESRF Biological Physics at Large Facilities Conference, Keynote Address, Grenoble, France, 2008.
- * International Symposium on Dental Morphology, Keynote Address, Greifswald, Germany, 2008.
- * Stony Brook University, Paleobiology Seminar Series, Stony Brook, NY, 2008.
- * Brandeis University, Human Origins Guest Lecturer, Waltham, MA, 2008.
- * ESRF Annual Users Meeting, Invited Symposium, Grenoble, France, 2008.
- * Harvard University, Biological Anthropology Seminar Series, Cambridge, MA, 2007.
- * European Federation for Primatology Congress, Plenary Address, Prague, Czech Republic, 2007.
- * Weizmann Institute, Research Symposium, Rehovot, Israel, 2007.
- * Cafe Scientifique, Freiberg, Germany, 2007.
- * Max Planck Institute for Evolutionary Anthropology, Curators' Workshop Seminar, Leipzig, Germany, 2007.
- * Max Planck Institute for Evolutionary Anthropology, School of Human Origins, Leipzig, Germany, 2005.
- * Stony Brook University, Doctoral Commencement Ceremony Student Address, Stony Brook, NY, 2005.
- * Stony Brook University, Distinguished Doctoral Students' Awards Colloquium, Stony Brook, NY, 2005.
- * University of Freiburg, Institute for Human Genetics and Anthropology, Freiburg, Germany, 2005.
- * Stony Brook University, President's Junior Academy Research Program Keynote Address, Stony Brook, NY, 2002.
- * Stony Brook University, Women in Science and Engineering High School Program, Stony Brook, NY, 2002.

Workshops and Symposia Organized & Chaired

- * *Whole Brain Living: an Experiential Workshop for the Harvard University Graduate Women in Science and Engineering Program* (Co-leader with Allison Ballou), Harvard University, Cambridge, MA, March 30, 2014.
- * Radcliffe Institute Exploratory Seminar: *Interdisciplinary Perspectives on the Evolution and Development of the Vertebrate Head* (Co-chair with Arkhat Abzhanov), Radcliffe Institute, Cambridge, MA, June 1-2, 2012.
- * *Developmental Variation of the Primate Dentition: A Symposium in Honor of Donald J. Reid* (Co-chair with Debbie Guatelli-Steinberg), American Association of Physical Anthropologists' Annual Meeting, Minneapolis, MN, April 15, 2011.
- * *Dental Tissues Workshop: 2D and 3D Insights into Human Evolution*, (Co-chair with Jean-Jacques Hublin), Max Planck Institute for Evolutionary Anthropology, Leipzig, Germany, September 20-23, 2006.
- * *Stony Brook University Women's Leadership Symposium*, Stony Brook University, NY, April 25 & 27, 2002.

Teaching and Mentoring Experience

- * HU, HEB 1200: Neanderthals and Human Evolutionary History, Fall 2015.
- * HU, HEB 1423: Human Origins and Evolution, Spring 2013.
- * HU, HEB 1420: Human Evolutionary Anatomy, Spring 2009, 2010, 2011, 2012, 2015.
- * HU, HEB 1421: Teeth, Spring 2009, Fall 2009, 2011, 2012, 2015.
- * HU, FS 44s: Neanderthals and Human Evolutionary Theory, Fall 2009, 2011, 2012, 2014.
- * SBU, WIS 187: Introduction to Research: Dental Anthropology, 2000-2004.
- * SBU, ANP 300: Human Anatomy (Laboratory Instructor), Fall 2003.
- * SBU, HBA 521: Gross Anatomy (Substitute Laboratory Instructor & Tutor), Fall 2003.

- * SBU, HBA 531: The Body (Laboratory Instructor), Fall 2002.
- * SBU, Mentor for the Women in Science and Engineering W:W Mentor Program, 2000-2002.
- * SBU, BIO 151: Organisms to Ecosystems Laboratory (Laboratory Instructor), Fall 1998.
- * SUNY Geneseo, ANTH 203: Human Osteology (Teaching Assistant), Fall 1997.
- * SUNY Geneseo, ANTH 105: Introduction to Physical Anthropology (Teaching Assistant), Fall 1997.
- * SUNY Geneseo, BIO 104: Human Biology Laboratory (Laboratory Instructor), Spring 1997.

Student and Post-Doctoral Supervision

- * HU Undergraduate Independent Study Director: Cristina Alcorta, Jennifer Brawn, Charlotte Lane, Alison Liou, Amanda Papakyrikos (Wellesley College), Teresa Yang, John Zermeno
- * HU Undergraduate Honors Thesis Advisor: Amanda Papakyrikos (B.S. 2014), John Zermeno (A.B. 2009)
- * HU Primary Graduate Student Supervisor: Daniel Green (2009-present), Katherine Carter (2011-present)
- * HU Additional Graduate Student Thesis Committees: Katherine Zink (Ph.D. 2013)
- * Postdoctoral Supervisor: Anne Bonnin (2010), Adeline Le Cabec (2011-2014), Alexandra Houssaye (2010-2011), Akiko Kato (2010-2011), Vincent Lazzari (2008), Joane Pouech (2009-2010), Nancy Tang (2011-2014)

Institutional Service

- * HU, Women, Gender, and Sexuality Program Standing Committee, 2015.
- * HU, Women in STEM Mentoring Program Speaker, 2015.
- * HU, HEB Professional Development Presentation on Mentoring, 2015.
- * HU, HEB Weekly Departmental Seminar Coordinator, 2014-2015.
- * HU, Standing Committee on Women, 2012-2015.
- * HU, Co-Organizer and Moderator for Film Screening and Panel Discussion, Harvard Divinity School, 2014.
- * HU, Radcliffe Institute Junior Faculty Group Leader, 2013-2014.
- * HU, New Faculty Institute, Panelist for New Faculty Institute Event, 2013.
- * HU, University Hearing Committee Pool, 2012-2013.
- * HU, Anthropology Department Faculty Search Committee (external member), 2012-2013.
- * HU, Professors and Pastries Freshman Meet and Greet Panelist, 2011.
- * HU, Annual Undergraduate Research Fair Presentation, 2010-2013.
- * HU, Undergraduate Women's Leadership Project Speaker, 2010.
- * HU, HEB Primate Behavioral Ecology Faculty Search Committee Member, 2009-2010.
- * HU, FAS Senior Adviser on Faculty Development and Diversity Consultant, 2009-2010.
- * HU, HEB Department Website Development Committee, 2008-2013.
- * HU, HEB Department Seminar Series Co-Chair, 2008-2013.
- * HU, Pre-Dental Society Faculty Advisor, 2008-2013.
- * HU, Harvard Museum of Natural History's Evolution Exhibit Consultant, 2009.
- * HU, Science Mentor Program Career Panelist, 2009.
- * HU, Currier House Senior Common Room Member, 2008-present.
- * HU, Anthropology Department Graduate Curriculum Review Committee, 2008-2009.
- * HU, FAS New Faculty Women's Luncheon Organizer, 2008.
- * MPI-EVA, Institute Review Preparation Committee, 2006-2008.
- * MPI-EVA, Coordinator, Dental Tissues Working Group, 2005-2008.
- * MPI-EVA, Research Staff Publication Evaluation Committee, 2005-2006.
- * SBU, Anthropology Department Senator, Graduate Student Organization, 1999-2001, 2002-2004.
- * SBU Organizer and Chair of the Stony Brook University Women's Leadership Symposium, 2001-2002.
- * SBU, Vice President, Graduate Student Organization, 2001-2002.
- * SBU, Executive Committee, University (Faculty) Senate, 2001-2002.
- * SBU, Speaker of the Senate, Graduate Student Organization, 2001.

Professional Service and Memberships

- * Physical Anthropology Women's Mentoring Network Co-Founder and Steering Committee Member, 2008-present.
- * American Association of Physical Anthropologists' Steering Committee Member for Women's Mentoring Workshop, 2013-2014.
- * American Association of Physical Anthropologists Annual Meeting, Special Session Organizer & Co-Chair, 2011.

- * Society for Integrative and Comparative Biology DVM Meeting Session Chair, Harvard University, 2010.
- * Student Affairs Workshop Participant, International Primatological Society Congress, Kyoto, Japan, 2010.
- * European Virtual Anthropology Network Contributor for “Human Kind in 3D: In the Focus of Digital Techniques,” traveling museum exhibit in Germany, Austria, and France, 2007-2008.
- * Member of Association for Women in Science, American Association of Physical Anthropologists, American Association of University Women, Dental Anthropology Association, International Society of Vertebrate Morphologists, Paleoanthropology Society

Journals, Books, and Grants Refereed

American Journal of Human Biology, American Journal of Physical Anthropology, Annals of Human Biology, Anthropologischer Anzeiger, Archives of Oral Biology, Biological Journal of the Linnean Society, Current Anthropology, Current Biology, European Research Council, Evolutionary Anthropology, Folia Primatologica, Geochimica et Cosmochimica Acta, Graduate Women in Science Fellowships, The Harvard Undergraduate Research Journal, HOMO - Journal of Comparative Human Biology, International Journal of Primatology, Journal of Anatomy, Journal of Archaeological Science, Journal of Dental Research, The Journal of Experimental Biology, Journal of Human Evolution, Journal of the Mechanical Behavior of Biomedical Materials, Journal of Morphology, L.S.B. Leakey Foundation, National Science Foundation, Nature, Nature Communications, PLoS Genetics, PLoS ONE, Proceedings of the National Academy of Sciences USA, Quarterly Review of Biology, Science, Springer’s Vertebrate Paleobiology and Paleoanthropology Edited Volume Series, South African Journal of Science

Selected Interviews, Media Coverage, and Research Consulting

- * *Science News*: "Fossil teeth flesh out ancient kids’ varied growth rates." Feb. 18, 2015.
- * *Harvard Magazine* "Portrait: Tanya Smith." September/October Issue, 2014, p. 19.
- * *Science for the Public* interview: “Infant Fossil Teeth: Clues to Ancient Human Development.” Dec. 13, 2013.
- * *Discover Magazine* article: “The Yawns Have It.” July/August Issue, 2013, p. 14.
- * *The New Yorker* article: “The Secrets of a Hundred-Thousand-Year-Old Tooth." May 31, 2013.
- * *Nature News* and Podcast interview: “Infant Tooth Reveals Neanderthal Breastfeeding Habits.” May 22, 2013.
- * *Science Now* article: “How Long Did Neandertals Breastfeed?” May 22, 2013.
- * *NPR* Audiocast interview: “Scientific Tooth Fairies Investigate Neanderthal Breast-Feeding.” May 22, 2013.
- * *New York Times*: “A Modern Stone Age Family? A Neanderthal’s Molar Suggests Early Weaning.” May 22, 2013.
- * Contributor to BBC documentary: “Virtual Autopsy.” October 22, 2012.
- * Earthsky Podcast interview: “Neanderthal Teeth Reveal Short Childhood.” November 29, 2010.
- * *Nature Research Highlights* article: “Neanderthals Matured Fast.” vol. 468, 2010, p. 478.
- * *NPR All Things Considered* interview: “Growing Slowly, Humans Outsmarted Neanderthals.” November 16, 2010.
- * *BBC The World Tonight* Radio Program interview, November 16, 2010.
- * *Science NOW* article: "Neandertal Children Developed on the Fast Track." November 15, 2010.
- * Consultant for book by Jon Cohen, *Almost Chimpanzee: Redrawing the Lines That Separate Us from Them*, 2011.
- * Contributor to *PBS NOVA* series: "Human Spark." January 6, 2010.
- * Contributor to *Discovery Magazine* article: "The Secret Life of Fossils," July/August Issue 2009.
- * Consultant for *Slate Magazine* article on aging the young Somali pirate, April 2009.
- * Contributor to *PBS NOVA* documentary series: "Becoming Human." November 17, 2009.
- * *BBC Discovery* Radio Program interview, March 11, 2009.
- * *Science* article: “The Birth of Childhood,” vol. 322, 2008, pp. 1040-1043.
- * Contributor to *National Geographic* magazine article: “Neanderthals.” October Issue, 2008.
- * Contributor to San Francisco *Exploratorium Museum* virtual exhibit: "Evidence: How Do We Know What We Know?" Summer 2008, <http://www.exploratorium.edu/evidence>
- * *Nederlandse Geologische Vereniging* (Journal of the Dutch Geological Association) article: “Neanderthaler Groeiende Sneller op dan Huidige Mens.” vol. 144, 2008, article 881.
- * *Science* article: “Dental Evidence Suggests Neandertals Matured Faster Than We Do.” vol. 318, 2007, p. 1547.
- * *Science* article: “Paleontologists get X-ray Vision.” vol. 318, 2007, pp. 1546-1547.
- * *Max Planck Research* article: “How Long Does a Child Remain a Child?” vol. 3, 2007, p. 10.
- * *France 2 & 3* (French National and Local TV) interviews, Grenoble, France, October 2 & 20, 2007.
- * Contributor to *WDR* (German TV) documentary: “Auf der Spur der Neandertal.” October 2, 2007.
- * *Smithsonian* article: "Very Early Childhood." May 2007, p. 14.
- * *Radio Mephisto* (German Public Radio Talkshow) interview, March 20, 2007.
- * *Science News* article: “Ancient Slow Growth,” March 17, 2007, vol. 171, pp. 163-164.
- * *BBC* Radio Program interviews (2) “The Evolution of Childhood." March 15 and 16, 2007.

- * *Voice of America* interview, March 15, 2007.
- * *National Geographic News* interview, March 14, 2007.
- * *Science NOW* article: "I Don't Want to Grow Up." March 12, 2007.
- * Consultant for *The History Channel* documentary: "Giganto: The Real King Kong." December 15, 2005.
- * *Allgemeiner Rundfunk Deutschland* (German TV) interview: "Special: King Kong." December 11, 2005.
- * Consultant for book by Alan Walker, *The Ape in the Tree: An Intellectual and Natural History of Proconsul*, 2005.