



## **Robert S. Walker**

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Database for Indigenous Cultural Evolution: [dice.missouri.edu](http://dice.missouri.edu)

### **EDUCATION**

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- 2004 Ph.D. with distinction, University of New Mexico, Department of Anthropology
- 2001 M.S. with distinction, University of New Mexico, Department of Anthropology
- 1998 B.A., Magna cum laude, Colorado State University, Department of Anthropology

### **EMPLOYMENT**

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- 2009- Assistant Professor, Department of Anthropology, University of Missouri
- 2008 Postdoctoral researcher, Max Planck Institute for Evolutionary Anthropology, Germany
- 2007 Research Assistant Professor, Anthropology Department, University of Colorado-Denver
- 2006 Lecturer, Department of Anthropology, University of New Mexico
- 2005 Lecturer, Department of Anthropology, University of California-Santa Barbara
- 2004 Laboratory worker, Abratech Corporation

### **UNIVERSITY TEACHING (4 universities)**

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- 2009- Hunters & Gatherers, Cultural Evolution, Cultures of Amazonia (University of Missouri)
- 2007 Introduction to Biological Anthropology, Evolution of Human Behavior (CU-Denver)
- 2006 Human Lifecourse, Human Evolutionary Ecology (University of New Mexico)
- 2005 Human Growth & Development (University of California-Santa Barbara)

### **RESEARCH INTERESTS**

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Human cultural variation, cultural phylogenetics, life-history evolution, mating and marriage, hunter-gatherers, South America, Amazonian language families

### **PEER-REVIEWED PUBLICATIONS (n = 23)**

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h-index = 12, citations = 320 (estimated contribution in parentheses)

- 2011 Hogg, R. T., R. S. Walker (10%). Life-history correlates of enamel microstructure in Cebidae (Platyrrhini, Primates). *Anatomical Record* **294**:2193-2206
- 2011 Gawlik, A., R. S. Walker (10%), Z. Hochberg. Impact of infancy duration on adult size in 22 subsistence-based societies. *Acta Paediatrica* **100**:e248-e252
- 2011 Hochberg, Z., A. Gawlik, R. S. Walker (10%). Evolutionary fitness as a function of pubertal age in 22 subsistence-based traditional societies. *International Journal of Pediatric Endocrinology* **2011**:2
- 2011 Walker, R. S. (85%), K. R. Hill, M. V. Flinn, R. M. Ellsworth. Evolutionary history of hunter-gatherer marriage practices. *PLoS ONE* **6**(4):e19066
- 2011 Walker, R. S. (85%), L. A. Ribeiro. Bayesian phylogeography of the Arawak expansion in lowland South America. *Proceedings of the Royal Society B* **278**:2562-2567
- 2011 Hill, K., R. S. Walker (35%), M. Bozicevic, J. Eder, T. Headland, B. Hewlett, A. M. Hurtado, F. Marlowe, P. Wiessner, B. Wood. Co-residence patterns in hunter-gatherer societies show unique human social structure. *Science* **331**:1286-1289
- 2011 Walker, R. S. (80%), M. J. Hamilton. Social complexity and linguistic diversity in Austronesian and Bantu population expansions. *Proceedings of the Royal Society B* **278**:1399-1404
- 2010 Walker, R. S. (75%), M. V. Flinn, K. R. Hill. Evolutionary history of partible paternity in lowland South America. *Proceedings of the National Academy of Sciences, USA* **107**:19195-19200

- 2010 Burger, O., R. S. Walker (25%), M. J. Hamilton. Lifetime reproductive effort in humans. *Proceedings of the Royal Society B* **277**:773-777
- 2009 Hamilton, M. J., O. Burger, J. P. DeLong, R. S. Walker (10%), M. Moses, J. H. Brown. Population stability, cooperation and the invasibility of the human species. *Proceedings of the National Academy of Sciences, USA* **106**:12255-12260
- 2008 Walker, R. S. (80%), M. Gurven, O. Burger, M. J. Hamilton. The trade-off between number and size of offspring in humans and other primates. *Proceedings of the Royal Society B* **275**:827-833
- 2008 Walker, R. S. (80%), M. J. Hamilton. Life history consequences of density dependence and the evolution of human body sizes. *Current Anthropology* **49**:115-122
- 2007 Hamilton, M. J., B. T. Milne, R. S. Walker (10%), O. Burger, J. H. Brown. The complex structure of hunter-gatherer social networks. *Proceedings of the Royal Society B* **274**:2195-2202
- 2007 Hamilton, M. J., B. T. Milne, R. S. Walker (10%), J. H. Brown. Nonlinear scaling of space use in human hunter-gatherers. *Proceedings of the National Academy of Sciences, USA* **104**:4765-4769
- 2007 Hill, K., A. M. Hurtado, R. S. Walker (10%). High adult mortality among Hiwi hunter-gatherers: Implications for human evolution. *Journal of Human Evolution* **52**:443-454
- 2006 Walker, R. S. (75%), O. Burger, J. Wagner, C. Von Rueden. Evolution of brain size and juvenile periods in primates. *Journal of Human Evolution* **51**:480-89
- 2006 Walker, R. S. (70%), M. Gurven, K. Hill, A. Migliano, N. Chagnon, R. De Souza, G. Djurovic, R. Hames, A. M. Hurtado, H. Kaplan, K. Kramer, W. J. Oliver, C. Vallenggia, T. Yamauchi. Growth rates and life histories in twenty-two small-scale societies. *American Journal of Human Biology* **18**:295-311 (feature article)
- 2006 Walker, R. S. (75%), K. Hill, O. Burger, A. M. Hurtado. Life in the slow lane revisited: Ontogenetic separation between chimpanzees and humans. *American Journal of Physical Anthropology* **129**:577-583
- 2006 Gurven, M., R. S. Walker (40%). Energetic demand of multiple dependents and the evolution of slow human growth. *Proceedings of the Royal Society B* **273**: 835-841
- 2005 Burger, O., M. Hamilton, R. S. Walker (10%). The prey as patch model: A marginal gains curve for vertebrate prey. *Journal of Archaeological Science* **32**:1147-1158
- 2003 Walker, R. S. (80%), K. Hill. Modeling growth and senescence in physical performance among the Ache of Eastern Paraguay. *American Journal of Human Biology* **15**:196-208
- 2002 Walker, R. S. (80%), K. Hill, H. Kaplan, G. MacMillan. Age-dependency in hunting ability among the Ache of eastern Paraguay. *Journal of Human Evolution* **42**:639-657
- 2001 Todd, L. C., D. C. Jones, R. S. Walker (10%), P. Burnett, J. Eighmy. Late archaic bison hunters in Northern Colorado: 1997-1999 Excavations at the Kaplan-Hoover Bison Bonebed (5LR3953). *Plains Anthropologist* **46**:125-147

#### **BOOK CHAPTER ( $n = 1$ )**

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- 2012 Hamilton, M. J., O. Burger, R. S. Walker (10%). Human Ecology, in *Metabolic Ecology: A Scaling Approach*. Eds. R.M. Sibly, A. Kodric-Brown, and J.H. Brown. John Wiley & Sons, Ltd, pp. 248-257

#### **BOOK REVIEWS ( $n = 2$ )**

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- 2006 Walker, R. S. Review of "The Cambridge Encyclopedia of Hunters and Gatherers", eds. Lee, R. and R. Daly. *Journal of Anthropological Research* **62**:264-266
- 2005 Walker, R. S. Review of "Methods in Human Growth Research", eds. Hauspie, R. L., N. Cameron, and L. Molinari. *American Journal of Human Biology* **17**:211-212

## **ACADEMIC AWARDS**

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- 2001 National Science Foundation Graduate Fellowship for 3 years
- 2001 UNM Brolio-Basehart Society for American Archaeology Poster Award
- 1999 UNM Lewis R. Binford Graduate Fellowship for 2 years
- 1999 CSU Distinguished Scholar's Award, President's Scholarship, Center for Human Paleocology Distinguished Student Award, and Research Symposium Poster of Highest Distinction

## **FIELDWORK (47 months)**

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- 2011 Alloparental kin investment and female reproductive strategies, Central Brazil, 6 months
- 2010 Personality research with Ache, Paraguay, 1 month
- 2009 Cultural and linguistic variation in lowland South America, 6 months
- 2006 Demographic survey of Trio and Wayana in Brazil and Suriname, 3 months
- 2005 Visual evoked potentials/electroencephalography, Ache, Paraguay, 2 months
- 2002 Growth and life history of Maku, Brazil, 6 months
- 2000 Age-specific hunting ability of Ache, Paraguay, 4 months
- 1999 Archaeology, Hudson-Meng Bison Bonebed, Nebraska, 3 months
- 1998 Archaeology, Vore Buffalo Jump, Wyoming, 1 month
- 1998 Archaeology, Kaplan-Hoover Bison Bonebed, Colorado, 12 months
- 1996 Coastal rainforest ecology, School for Field Studies, British Columbia, 5 months

## **RESEARCH GRANTS AND FELLOWSHIPS (\$163,500)**

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- 2011 University of Missouri Research Board Grant, Alloparental kin investment and female reproductive strategies (Brazil), with PhD student Ryan Ellsworth, \$34,000
- 2011 University of Missouri Arts & Sciences Alumni Organization Faculty Incentive Grant, Partible paternity (Brazil), \$1,500
- 2007 LSB Leakey Foundation General Research Grant, Growth and life history of the Hiwi (Venezuela), \$7,000
- 2003 Wenner-Gren Foundation Dissertation Research Grant (#6941), Growth and development of the Maku (Brazil), \$22,000
- 2003 National Science Foundation Dissertation Improvement Grant, Growth and development of the Maku (Brazil), \$10,000
- 2003 LSB Leakey Foundation General Research Grant, Growth and development of the Maku (Brazil), \$12,000
- 2002 UNM Student Research and Allocations Committee Grant, Maku (Brazil), \$1,000
- 2002 UNM Latin American and Iberian Institute Grants, Maku (Brazil), \$3,000
- 2001 National Science Foundation Graduate Fellowship, 3 years, \$72,000
- 2000 UNM Research, Projects, and Travel Grant, 2000, Ache (Paraguay), \$1,000

## **INVITED PROFESSIONAL PRESENTATIONS (*n* = 13)**

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- 2010 Evolutionary history of partible paternity. Yale University
- 2010 Cultural variation in the Amazon. Missouri Southern State University
- 2009 Lifetime reproductive effort in humans. Washington University
- 2008 The expansionist ape: Human life history from a comparative perspective. PIBBS, UNM
- 2008 Trade-off between number and size of offspring in humans and other animals. AAAS-SWARM, UNM
- 2008 Life-history theory of small and large body size in hunter-gatherers. School of Human Evolution and Social Change, Arizona State University

- 2007 Age uncertainty and comparative human life history. Aging conference, Rostock, Germany
- 2007 Trade-off between number and size of offspring in humans and other primates. 19<sup>th</sup> Annual Human Behavior and Evolution Society, Williamsburg, VA
- 2007 Density dependence and human life history evolution. 76<sup>th</sup> Annual American Association for Physical Anthropologists, Philadelphia
- 2006 Life history consequences of density dependence in the evolution of hunter-gatherer body sizes. 18<sup>th</sup> Annual Human Behavior and Evolution Society, Philadelphia
- 2006 Activity patterns and health of Ache hunter-gatherers in Paraguay. 53<sup>rd</sup> Annual American College of Sports Medicine Meeting, Denver
- 2006 Are there two human ontogenies? 75<sup>th</sup> Annual American Association for Physical Anthropologists, Anchorage
- 2005 Growth rates and life histories in 21 small-scale societies. UNM Human Evolutionary and Behavioral Sciences, Albuquerque

### **PROFESSIONAL SERVICE**

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- Developer of Database for Indigenous Cultural Evolution <<http://dice.missouri.edu>>
- Reviewer for international and multi-disciplinary grants, journals, and professional meetings
- Co-founder of Evolutionary Anthropology Informal Lecture Series at the University of Missouri
- Advisor for graduate student fieldwork in South America