



Assistant Professor 1990-1993

Department of Anthropology

University of South Florida

Visiting Assistant Professor 1988-1990

Department of Anthropology

University of South Florida

Graduate Teaching Assistant 1985-1987

Department of Anthropology

University of Kansas

Graduate Teaching Assistant 1984-1985

Department of Anthropology

University of Cincinnati

BOOK

Madrigal L. Human Biology of Afro-Caribbean populations. 2006.  
Cambridge University Press. Reprinted in 2011.

EDITED BOOK

## TEXTBOOK

1. Madrigal, L. Statistics for anthropology. 2012. Second edition. Cambridge University Press.
2. Madrigal L. 1998. Statistics for anthropology. Cambridge University Press.

## ARTICLES IN PREPARATION AND UNDER REVIEW

1. Susca, R., Clancy, K. Madrigal, L. and Barbujani, G. Natural selection accounts for differences in dizygotic twinning rates at the worldwide scale”Eumtothe wEuopoean Journl sof

## PUBLISHED ARTICLES

- 1 Huang, H., Clancy, K. B. H., Kelly, K. & Madrigal, L. Genomic areas associated with MZ twinning differ from those associated with DZ twinning. *American Journal of Physical Anthropology* 165, 126-127 (2018).
- 2 Madrigal, L. *et al.* High mitochondrial mutation rates estimated from deep-rooting Costa Rican pedigrees. *American Journal of Physical Anthropology* 148, 327-333, doi:10.1002/ajpa.22052 (2012).
- 3 Madrigal, L. *et al.* Obesity, Hypertension, and Migration: A Meta-Analysis of Populations of the South Asian Diaspora. *Human Biology* 83, 71-86 (2011).
- 4 Castri, L. *et al.* Mitochondrial Polymorphisms Are Associated Both with Increased and Decreased Longevity. *Human Heredity* 67, 147-153, doi:10.1159/000181152 (2009).
- 5 Madrigal, L. & Melendez-Obando, M. Grandmothers' longevity negatively affects daughters' fertility. *American Journal of Physical Anthropology* 136, 223-229, doi:10.1002/ajpa.20798 (2008).
- 6 Madrigal, L., Ware, B., Hagen, E., Blell, M. & Otarola, F. The East Indian diaspora in Costa Rica: Inbreeding avoidance, marriage patterns, and cultural survival. *American Anthropologist* 109, 330-337, doi:10.1525/aa.2007.109.2.330 (2007).
- 7 Madrigal, L. & Kelly, W. Human skin-color sexual dimorphism: A test of the sexual selection hypothesis. *American Journal of Physical Anthropology* 132, 470-482, doi:10.1002/ajpa.20453 (2007).
- 8 Madrigal, L. & Kelly, W. Human skin-color sexual dimorphism: A test of the sexual selection hypothesis. Reply to Frost (2007). *American Journal of*

- cultural discussion. *American Journal of Physical Anthropology* 122, 355-360, doi:10.1002/ajpa.10282 (2003).
- 11 Madrigal, L., Relethford, J. H. & Crawford, M. H. Heritability and anthropometric influences on human fertility. *American Journal of Human Biology* 15, 16-22, doi:10.1002/ajhb.10109 (2003).
  - 12 Madrigal, L. & Koertvelyessy, T. Epidemic cycles in agricultural populations: A cross-cultural study. *Human Biology* 75, 345-354, doi:10.1353/hub.2003.0047 (2003).
  - 13 Madrigal, L. *et al.* Ethnicity, gene flow, and population subdivision in Limon, Costa Rica. *American Journal of Physical Anthropology* 114, 99-108, doi:10.1002/1096-8644(200102)114:2<99::aid-ajpa1010>3.0.co;2-v (2001).
  - 14 Madrigal, L., Saenz, G., Chavez, M. & Dykes, D. Frequency of twinning in two Costa Rican ethnic groups: An update. *American Journal of Human Biology*. 220-226, doi:10.1002/1520-6300(200102/03)13:2<220::aid-ajhb1032>3.0.co;2-7 (2001).
  - 15 Madrigal, L. & Ware, B. Mating pattern and population structure in Escazú Costa Rica: A study using marriage records. *Human Biology* 71, 963-975 (1999).
  - 16 Madrigal, L. Twinning trend in Escazú, Costa Rica, 1851-1901. *Human Biology* 69, 269-276 (1997).
  - 17 Madrigal, L. Sex ratio in Escazú, Costa Rica, 1851-1901. *Human Biology* 68, 427-436 (1996).
  - 18 Madrigal, L. Differential fertility of mothers of twins and mothers of singletons - study in Limon, Costa-Rica. *Human Biology* 67, 779-787 (1995).
  - 19 Madrigal, L. Twinning rates in admixed Costa-Rican populations. *American Journal of Human Biology* 6, 215-218, doi:10.1002/ajhb.1310060209 (1994).
  - 20 Madrigal, L. Mortality seasonality in Escazú, Costa-Rica, 1851-1921. *Human Biology* 66, 433-452 (1994).
  - 21 Madrigal, L. Lack of birth seasonality in a 19th-century agricultural population - Escazú, Costa-Rica. *Human Biology* 65, 255-271 (1993).

- 22 Baer, R. D. & Madrigal, L. Intra-household allocation of resources in larger and smaller Mexican households. *Social Science & Medicine* 36, 305-310, doi:10.1016/0277-9536(93)90014-u (1993).
- 23 Madrigal, L. Differential sex mortality in a rural 19th-century population - Escazú, Costa-Rica. *Human Biology* 64, 199-213 (1992).
- 24 Madrigal, L. Menarcheal age and spontaneous abortion - further evidence for a connection. *American Journal of Human Biology* 3, 625-628, doi:10.1002/ajhb.1310030612 (1991).
- 25 Madrigal, L. The reliability of recalled estimates of menarcheal age in a sample of older women. *American Journal of Human Biology* 3, 105-110, doi:10.1002/ajhb.1310030205 (1991).
- 26 Madrigal L. and B. Ware. 1997. Inbreeding in Escazú, Costa Rica (1800-1840, 1850-1899). Isonymy and ecclesiastical dispensations. *Human Biology*. 69:703-714.
- 27 Madrigal, L. Hemoglobin genotype, fertility, and the malaria hypothesis. *Human Biology* 61, 311-325 (1989).

#### BOOK CHAPTERS

- 1 Madrigal, L. & Barbujani, G. *Partitioning of Genetic Variation in Human Populations and the Concept of Race*. (2007).
- 2 Madrigal, L. in *Human Biologists in the Archives: Demography, Health, Nutrition and Genetics in Historical Populations* Vol. 34 *Cambridge Studies in Biological and Evolutionary Anthropology* (eds D. A. Herring & A. C. Swedlund) 11-31 (2003).
- 3 Madrigal, L. *et al.* in *Human Migration* (ed M. H. Crawford) (Cambridge University Press, 2012).
- 4 Madrigal, L. & Willoughby, J. in *A companion to biological anthropology* (ed CS Larsen) 222-242 (Wiley-Blackwell, 2010).
- 5 Madrigal, L., Mwenza, B., Ruiz, E. & Otarola, F. in *Health, Risk, and Adversity: A Contextual View from Biological Anthropology*. (eds A Fuentes & C Panter-Brick) 236-255. (Berghahn Books, 2000).

## BOOK REVIEWS

- 1 *Human Evolutionary Biology*. 2010. Edited by Michael P. Muehlenbein.  
*American Journal of Physical Anthropology*. 2012. 148: 655–656.

- 3 Trazmonte, K., Godfrey, D. & Madrigal, L. The distribution of the C677T allele of the MTHFR human gene in Eurasia: evidence of two distinct clines. *American Journal of Physical Anthropology* 159, 317-317 (2016).
- 4 Balentine, C. M. *et al.* Genetic factors influencing the phenotypic variation leading to clinical complaints in sickle cell trait athletes. *American Journal of Physical Anthropology* 159, 86-86 (2016).
- 5 Huang, H., Clancy, K. B. H., Zhu, Y. L. & Madrigal, L. Women who deliver twins are more likely to smoke and have high frequencies of specific SNPs: results from a sample of African-American women who delivered pre-term, low birth weight babies. *American Journal of Physical Anthropology* 156, 170-171 (2015).
- 6 Madrigal, L. *et al.* Factors associated with spontaneous multiple pregnancies in a sample of women who delivered pre-term, low birth weight babies. *American Journal of Physical Anthropology* 153, 174-174 (2014).
- 7 Flansburg, C. N., Stone, A., Godfrey, D., Madrigal, L. & Gonzalez, E. Is sickle-cell trait as benign as is usually assumed? *American Journal of Physical Anthropology* 150, 123-124 (2013).
- 8 Madrigal, L. *et al.* High mitochondrial mutation rates estimated from deep-rooting Costa Rican pedigrees. *American Journal of Physical Anthropology* 147, 200-200 (2012).
- 9 Rivara, A. & Madrigal, L. Ethnicity does not affect reproductive outcomes in Limon, Costa Rica. *American Journal of Physical Anthropology* 144, 254-254 (2011).  
*Physical Anthropology* 227.
- 10 Brady, J. & Madrigal, L. Gender, BMI, and migration: A meta-analysis of populations of the East-Asian diaspora. *American Journal of Physical Anthropology*, 72-72 (2010).
- 11 Madrigal, L., Melendez-Obando, M. & Villegas-Palma, R. Changes in women's fertility can be tied to their population's demographic processes. *American Journal of Physical Anthropology*, 181-181 (2009).
- 12 Madrigal L., E. Ruiz, M. Blell and B Danforth. 2008. Which anthropometric measures best predict body fat percent measured by electrical bio-impedance? Presented at the 77<sup>th</sup> meeting of the AAPA. Columbus, Ohio.
- 13 Madrigal, L., Raxter, M. H., Ruiz, E.,





24 Madrigal, L., Koertvelyessy, T., Ware, B. & Cuevas, T. Cyclical and non-

|  |                                 |           |          |
|--|---------------------------------|-----------|----------|
| Measuring maternal salivary cortisol during homebirths. Together with graduate student Nicole Falk Smith | USF creative scholarship grant. | 2017-2018 | 9,942.00 |
| Interviewing mothers of twins in Kerala, India.  | NSF EAGER grant.                | 2016      | 6,409.00 |
| Funds to travel to India for research project.   | CAS.USF.                        | 2015-2016 | 1,500.00 |
| Parasitic infections and reproductive health in Brazil.  | USF creative scholarship grant. | 2015      | 9,757.00 |
| Fall 2013 College of Arts and Sciences Internal Awards Review Committee                                  | CAS.USF.                        | 2013      | 1,500.00 |
| The NCAA Graduate Student Research Grant (with graduate student Carroll Flansburg)                       | NCAA                            | 2013      | 7,500.00 |
| International Faculty Travel Award   | USF                             | 2012      | 2,500.00 |
| University of South Florida CAS conference coordination award  | CAS.USF.                        | 2007      | 750.00   |
| Travel Award   | The Patel Center                | 2007      | 100.00   |
| International Faculty Travel Award   | USF                             | 2006      | 2,500.00 |
| International Faculty Travel Award   | USF                             | 2005      | 2,500.00 |
| Grant in support of the AAPA conference held in Tampa.   | USF's Provost Office.           | 2004      | 1,500.00 |

|   |   |           |           |
|---|---|-----------|-----------|
| Grant in support of the AAPA conference held in Tampa.  | CAS.USF.                                      | 2004      | 1,000.00  |
| The inheritance of unusual longevity: a diachronic study.   | The NIA/NHI                                   | 2003      | 72,000.00 |
| Globalization and disease: a study in an African and an East-Indian derived settlement in Costa Rica. | The USF globalization center.                 | 2003      | 20,000.00 |
| Inbreeding and isonymy in a 19th century rural population: Escazú, Costa Rica.                        | Research and Creative Scholarship grant. USF. | 1995      | 7,000.00  |
| Support for attendance to a short course in experimental and mammalian genetics.                      | CAS.USF.                                      | 1994      | 2,000.00  |
| Scholarship for foreign female students.  | P.E.O International Sisterhood Scholarship    | 1987-1988 | 2,350.00  |
| Summer Fellowship.  | University of Kansas                          | 1987      | 1,000.00  |
| The Pierre Stouse Memorial  |   |           |           |

## INVITED LECTURES

Darwin day teachers' workshop. 2010-present. Has participated every year by giving a lecture on the "latest about human evolution" to a group of science teachers from Hillsborough County.

A closer look at Jane Goodall. A panel discussion about the life and work of Jane Goodall. An Honors College event hosted by the Honors Dean. University of South Florida. Fall, 2014.

Homo floresiensis, H. heidelbergensis, Neandertals, Denisovans, oh my!! Darwin Day Celebration at the University of South Florida. 2014. Co-sponsored by the Hillsborough County Public Schools.

A tale of three continents: How African Slavery and East-Indian Indentured Migration Helped Shape the Human Population of Limón, Costa Rica. Lecture given at the University of Kansas, Co-sponsored by: Center for Latin American & Caribbean Studies, Kansas African Studies Center, Department of African & African American Studies and Department of Anthropology

Key note speaker . Latin American Association of Biological Anthropologists. November 2012, San Jose, Costa Rica.

Human variation and evolution: A cycle of lectures given to Department of Anthropology, University of Cordoba. Cordoba, Argentina. Summer, 2012.

*H. floresiensis*, *A. Sediba*, Denisovans, oh my!! What is New in Human Evolution. a Rica.

The evolution of human post-menopausal longevity. Invited lecture given at the University of South Florida. Department of Integrative Biology. Fall, 2011.

What's love have to do with it? A Valentine's Day version of Darwin's day. Lecture hosted by the anthropology club at USF. 2011.

Charles Darwin. The free thinkers of USF's celebration of Charles Darwin's birthday. February, 2010.

Darwin, modern evolutionary theory and human behavior. Invited lecture given at the University of South Florida. Department of Psychology. November, 2009.

Darwin: His Life, His Theory, and Enduring Contribution. Invited lecture given to the Tampa Bay Fossil Club. October, 2009.

El origen y la evolución de la población Indo-Limonense. Given at the University of Costa Rica, Department of Anthropology lecture series. June, 2009.

Human evolution for elementary school students. Invited lecture. Pizzo Elementary School. Tampa, FL. April, 2009.

Evolution and the Human Body. Part of MOSI (Museum of Science and Industry. Tampa) Special Events. March 2009.

Darwin: His Life, His Theory, and Enduring Contribution. Lecture given to celebrate the Year of Science at Brooker Creek Preserve Environmental Education Center. Tarpon Springs, FL. February 2009.

Darwin's contribution to present society. The free thinkers of USF's celebration of Charles Darwin's birthday. February 2009.

Applying biocultural outcomes. Presented at: Advancing biocultural perspectives in physical anthropology. A conference organized by Agustín Fuentes and Thomas McDade. University of Notre Dame. February, 2007.

Key note speaker . Latin American Association of Biological Anthropologists. October, 2006. Ouro Preto, Brazil.

Key note speaker. Argentinean Biological Anthropology Conference. September, 2005. Cordoba, Argentina.

Department of Anthropology. University of Bologna. Spring, 2005.

Department of Anthropology. University of Pennsylvania. Spring, 2004.

Round table on excellence in teaching. University of South Florida. Spring 2001.

Department of Biology, University of Ferrara. Fall 2000, Spring 2003, Spring 2008.

Visiting Scholar Lecture Cycle. Department of Anthropology. University of Tennessee. Fall 2000.

The 20th scientific session of the Paleopathology Club, held in conjunction with the United States and Canadian Academy of Pathology. March, 1997.

Department of Anthropology. Universidad de Costa Rica. Summer, 1996.

Department of Biology, the 1995-1996 colloquium series. University of South Florida.

## FIELD EXPERIENCE

December, 2016. Kerala, India. Collected genealogies and childbirth experiences from the community of Kodhini.

Summer, 2005. Westfalia Costa Rica. Returned to the field to work with the Indo-Costa Rican group and collect Y-chromosome samples.

Summer, 2004. Atenas, Costa Rica. Collection of blood samples and genealogies.

Summer, 2003. Westfalia and Cieneguita, Costa Rica. Work with the Culi and Afro-Limonense communities. Collected hair samples, skin color, and anthropometrics.

Summer, 1986-1995. Escazú, Costa Rica. Demographic data from Church records.

Summer, 1987. Limón, Costa Rica. Blood samples fertility histories collected from 394 females.



## SERVICE TO THE FIELD

AAA executive board member (Biological anthropology seat). 2014-2017.

Member, advisory panel to the AAA's application to National Endowment for the Humanities through its "Humanities in the Public Square" program.

Editorial Committee (L. Madrigal, R. Gonzalez-Jose, Victor Acuna), Latin-American Association of Biological Anthropology, ALAB. Duties: Editing of a Biological Anthropology textbook sponsored by the association, made available free of charge, online. Publication date: 2016.

Past-President. AAPA. 2013-2014.

American Anthropological Association and Smithsonian Institute. Ad Hoc Committee on Public Education Initiatives on Immigration and Migration. 2012-1017

Member, organizing committee for the 2012 Latin American Conference of Biological Anthropology. 2012.

President, AAPA. 2011-2013.

President-elect, AAPA. 2010-2011.

Vice-president and Program Chair. AAPA (2008-2010). Organizer, "Theories and methods in applied biocultural anthropology". A conference held at the University of South Florida. 10/2007.

Editorial Board, *American Journal of Human Biology* (2008-2015).

Chair. Committee for the search for the new editor of the American Association of Physical Anthropologists Yearbook. 2006

Chair, student prize commi



## TEACHING AWARDS, HONORS

AAAS Fellow. An honor received in 2015.

Recipient of the Diamond Award. Conferred by the Delta Tau Lambda Sorority. October 2013.

Key note speaker. The USF anthropology undergraduate colloquium. 2005.

Voted one of the six most popular professors at USF by graduating seniors. Spring, 2004. Tampa Tribune, Monday, April 5<sup>th</sup>, 2004.

Faculty Role Model Mentor of the Year. USF McNair Scholars Program. 2003.

One of three nominees of USF for the CASE/Carnegie Professor of the year awards. 2001, 2002

Outstanding undergraduate teaching award University of South Florida. 1999.  
State University System-wide *Teaching Incentive Award*,

<http://www.sciencenewsline.com/summary/2015041723490029.html>

<http://www.bulletinstandard.org/science/smoking-and-mothers-genetics-combine-to-enhance-likelihood-of-twins-h814.html>

<http://healtheducation.org/2015/04/17/smoking-and-mothers-genetics-combine-to-increase-likelihood-of-twins/>

<http://www.amazonherald.com/news/smoking-and-mothers-genetics-combine-to-increase-likelihood-of-twins>

<http://www.bioportfolio.com/news/article/2300397/Smoking-and-mothers-genetics-combine-to-increase-likelihood-of-twins.html>

<http://www.twinsfoundation.com/twinsblog/2015/04/new-research-finds-smoking-and-mothers-genetics-combine-to-increase-medical-xpress-4/>

<http://www.hotelanna.biz/?p=49376>

<http://cloudtales.tumblr.com/post/116671515009/smoking-and-mothers-genetics-combine-to-increase>

[https://tagloom.com/post/PA944rS\\_3yJI](https://tagloom.com/post/PA944rS_3yJI)

<http://netzlesen.de/science-blog-smoking-and-mothers-genetics-combine-to-increase-likelihood-of-twins/>

<http://snewsi.com/id/15212764067/New-research-finds-smoking-and-mothers-genetics-combine-to-increase-likelihood-of-twins>

<http://www.noozilla.com/news/7102028/>

<http://www.medicalnewstoday.com/releases/292643.php>

<http://www.sciam.com/article.cfm?id=the-origin-of-menopause>

[http://www.digitaljournal.com/article/251668/The\\_Grandmother\\_Hypothesis](http://www.digitaljournal.com/article/251668/The_Grandmother_Hypothesis)

[http://media.www.usforacle.com/media/storage/paper880/news/2008/03/24/News/Long-Life\\_Linked\\_To\\_Fewer\\_Grandkids-3279943\\_shtml](http://media.www.usforacle.com/media/storage/paper880/news/2008/03/24/News/Long-Life_Linked_To_Fewer_Grandkids-3279943_shtml)

<http://www.newscientist.com/channel/being-human/dn13468-longlived-grannies-may-have-fewer-grandchildren.html>

<http://dienekes.blogspot.com/2008/03/grandmothers-longevity-negatively.html>

<http://www.topnews.in/health/long-lived-grannies-may-have-fewer-grandkids-21489>

<http://www.medworm.com/rss/search.php?qu=American+Journal+of+Physical+Anthropology&t=American+Journal+of+Physical+Anthropology&s=Search&f=source>

<http://cwmccabe.newsvine.com/news/2008/03/18/1374637-long-lived-grannies-may-have-fewer-grandchildren>

<http://news.krify.com/Technology/35590.html>

<http://www.seniorworldchronicle.com/2008/03/uk-long-lived-grannies-may-have-fewer.html>

[http://timesofindia.indiatimes.com/Long-lived\\_grannies\\_had\\_few\\_grandkids/articleshow/2868320.cms](http://timesofindia.indiatimes.com/Long-lived_grannies_had_few_grandkids/articleshow/2868320.cms)

<http://www2.tbo.com/content/2008/may/08/me-evolution-darwin-day-big-problem/>

<http://www2.tbo.com/content/2008/may/11/me-darwinners-and-darlosers-stupidity-is-1-thing-t/>

<http://news.sciencemag.org/scienceinsider/2013/04/survey-finds-sexual-harrassment.html>

<http://www.momsteam.com/sickle-cell-trait/genetic-mutation-may-explain-why-some-sickle-cell-trait-athletes-at-greater-risk-exertional-sickling>

## TEACHING EXPERIENCE

### UNDERGRADUATE:

Evolutionary and bio-cultural aspects of health and disease.

Biological Anthropology, Department of Anthropology. University of South Florida

Introducción a la Antropología Biológica. (UCR)

Human Variation. Department of Anthropology. University of South Florida

Human Evolution. Department of Anthropology. University of South Florida

Human Biology of Caribbean Groups. Department of Anthropology. University of South Florida.

### GRADUATE

Biocultural bases of health and disease. Department of Anthropology. University of South Florida.

Human Variation. Department of Anthropology. University of South Florida

Evolutionary theory in Biological Anthropology. Department of Anthropology. University of South Florida

Seminar in Physical Anthropology. Department of Anthropology. University of South Florida

Quantitative Methods. Department of Anthropology. University of South Florida.

Advanced Quantitative Methods. Department of Anthropology. University of South Florida