

*IVÁN DARÍO SOTO-CALDERÓN. BIOL. MSC. PHD.*

Biology Institute, University of Antioquia, Medellín, Colombia.  
E-mail: ivandariosoto@hotmail.com  
ivan.soto@udea.edu.co

I am interested in understanding the historical and genetic factors responsible for animal diversification in the tropics and applications in conservation strategies. My initial research experience was mostly focused on the genetic anthropology of Amerinds and isolated human populations from Colombia. I have also collaborated with projects in the molecular ecology of the African duikers and Malagasy butterflies. My doctoral dissertation addressed problems in the evolutionary genetics of African Great Apes and their implications in conservation and phylogeography. I am established in Colombia, where I hold a position at the University of Antioquia and have an ongoing research program in the conservation genetics of primates and other species of interest in conservation. All this has been possible through collaboration with local zoos, universities, and wildlife authorities.

Education

\* BSc. Biology, Emphasis in Zoology and Genetics. University of Antioquia, Medellín, Colombia. 1999.

\* MSc. Basic Biomedical Sciences, Emphasis in Evolutionary Genetics. University of Antioquia, Medellín, Colombia. 2003.

\* PhD. Conservation Biology. University of New Orleans. New Orleans, LA, USA. 2012.

Professional Experience

1. Associated Researcher and Teaching Instructor. Population Genetics Laboratory. University of Antioquia. 1998-2003.

2. Associate Professor. Biology Institute. University of Antioquia. 2003-present. Courses: Conservation Genetics, General Genetics, Mechanisms of Biological Evolution, Population Ecology Laboratory.

3. Teaching Assistant. Contemporary biology. Department of Biological Sciences. University of New Orleans, New Orleans, LA, USA. 2005-2007.

4. Research Assistant. Nicola Anthony's Lab. Department of Biological Sciences. University of New Orleans, New Orleans, LA, USA. 2007-2011.

Referred Publications

1. Jorge Ospina-Duque, Constanza Duque, Luis Carvajal-Carmona, Daniel Ortiz-Barrientos, Iván Soto, Nicolás Pineda, Mauricio Cuartas, Jorge Calle, Carlos López, Luis Ochoa, Jenny García, Juliana Gomez, Angela Agudelo, Maria Lozano, Gabriel Montoya, Angelica Ospina, Maria López, Aurora Gallo, Ana Miranda, Lina Serna, Patricia Montoya, Carlos Palacio, Gabriel Bedoya, Mark McCarthy, Victor Reus, Nelson Freimer and Andres Ruiz-Linares. 2000. An Association Study of Bipolar Mood Disorder (Type

- 1) with the 5-HTTLPR Serotonin Transporter Polymorphism in a Population Isolate from Colombia. *Neuroscience letters* 292: 199-202.
2. Carvajal-Carmona LG, Soto ID, Pineda N, Ortiz-Barrientos D, Duque C, Ospina-Duque JH, Montoya P, Álvarez V, Bedoya G and Ruiz-Linares A. 2000. Strong Amerind/Caucasoid Gender Bias and Evidence of a Sephardic Contribution among the Founders of a Population in North West Colombia. *Am. J. Human Genet.* 67: 1287-1295.
3. Mesa N, Mondragón MC, Soto ID, Parra MV, Duque C, Ortiz-Barrientos D, García LF, Vélez ID, Bravo ML, Múnera JG, Bedoya G, Bortolini MC and Ruiz-Linares A. 2000. Autosomal, mtDNA and Y-Chromosome Diversity in Amerinds: pre and post-Columbian Patterns of Gene Flow in South America. *Am. J. Human Genet.* 67: 1277-1286.
4. Ospina-Duque J, Ochoa L, García J, López C, Calle J, Carvajal L, Soto I, Pineda N, Duque C, Miranda A, Cuartas M, Gómez J, Agudelo A, Montoya G, López M, Gallo A, Montoya P, Palacio C, Bedoya G, McCarthy M, Reus V, Freimer N, Ruiz-Linares A. 2001. Loci Genéticos Asociados al Trastorno Bipolar: Estudios en Población Colombiana. *Rev. Col. Psiqu.* 30 (3): 239-247.
5. Bedoya G, Montoya P, Garcia J, Soto I, Bourgeois S, Carvajal L, Labuda D, Alvarez V, Ospina J, Hedrick PW, Ruiz-Linares A. 2006. Admixture dynamics in Hispanics: a shift in the nuclear genetic ancestry of a South American population isolate. *Proc. Natl. Acad. Sci. USA.* 103 (19):7234-7239.
6. Bedoya G, García J, Montoya P, Rojas W, Amézquita ME, Soto I, López MC, Ospina-Duque J, Ruiz-Linares A. 2006. Análisis de isonimia entre poblaciones del noroeste de Colombia. *Biomédica.* 26: 538-545.
7. Soto-Calderón ID, Ntie S, Mickala P, Maisels F, Wickings EJ, Anthony NM. 2009. Effects of Storage Type and Time on DNA Amplification Success in Tropical Ungulate Faeces. *Molec. Ecol. Resour.* 9: 471-479.
8. Linares M, Soto-Calderón ID, Lees DC, Anthony N. 2009. High mitochondrial diversity in geographically widespread butterflies of Madagascar: a test of the DNA barcoding approach. *Molec. Phylog. Evol.* 50: 485-495.
9. Jensen-Seaman MI, Wildschutte JVH, Soto-Calderón ID, Anthony NM. 2009. A Comparative Approach Shows Differences in Patterns of Numt Insertion During Hominoid Evolution. *J. Mol. Evol.* 68: 688-699.
10. Ntie S, Soto-Calderón ID, Eaton MJ, Anthony 2010. Cross-species amplification of bovid microsatellites in central African duikers (genus *Cephalophus*) and other sympatric artiodactyls. *Molec. Ecol. Resour.* 10: 1059-1065.
11. Soto-Calderón ID, Lee EJ, Jensen-Seaman MI, Anthony NM. 2012. Factors Affecting the Relative Abundance of Nuclear Copies of Mitochondrial DNA (Numts) in Hominoids. *J. Mol. Evol.* 75: 102-111.
12. Rojas W, Campo O, García J, Soto I, Duque C, Bedoya G, Ruiz-Linares A. 2012. Coancestría de apellidos y linajes del cromosoma Y en el noroeste de Colombia. *Rev. Col. Antrop.* 48: 49-79.
13. Acevedo-Garcés JA, Álvarez-Cardona J, Vargas-Valencia V, Hernández-Castro C, García-Montoya GM, Soto-Calderón ID. 2014. Clinical and parasitological evaluation of white-footed tamarins (Primates: Cebidae:

*Saguinus leucopus*) from two free-range populations located in San Carlos and San Rafael (Antioquia, Colombia). *Rev. CES Med. Vet. Zoot.* 9: 68-83.

14. Das E, Hergenrother SD, Soto-Calderón ID, Dew JL, Anthony NM, Jensen-Seaman MI. 2014. Complete mitochondrial genome sequence of the eastern gorilla (*Gorilla beringei*) and implications for African ape biogeography. *J. Hered.* 105: 752-761.

15. Soto-Calderón ID, Clark NJ, Wildschutte JVH, DiMattio K, Jensen-Seaman MI, Anthony NM. 2014. Identification of Species-specific Nuclear Insertions of Mitochondrial DNA (numts) in Gorillas and their Potential as Population Genetic Markers. *Mol. Phylog. Evol.* 81: 61-67.

16. Soto-Calderón ID, Dew JL, Bergl RA, Jensen-Seaman MI, Anthony NM. 2015. Admixture between Historically Isolated Mitochondrial Lineages in captive Western Gorillas: Recommendations for Future Management. *J. Hered.* 106: 310-314.

17. Soto-Calderón ID. 2015. Conservación de la Biodiversidad en Colombia: Acción y Reversión de los Procesos de Extracción. *Bol. Col. Biol. Evol.* 3(1): 12-13.

18. Londoño-Díaz N, Cerón-Muñoz MF, Soto-Calderón ID. 2016. Genetic diversity of Senepol cattle in Colombia using ten multiplexed microsatellites. *Livestock Res. Rural Development.* 28: 137.

19. Soto-Calderón ID, Acevedo-Garcés YA, Álvarez-Cardona J, Hernández-Castro C, García-Montoya GM. 2016. Physiological and parasitological implications of living in a city: the case of the white-footed tamarin (*Saguinus leucopus*). *Am. J. Primat.* 78: 1272-1281.

20. Franco-Gutiérrez LJ, Álvarez-Cardona J, Soto-Calderón ID. (2017). Sex identification of Neotropical macaws (*Ara* spp.) from invasive and non-invasive samples. *Ornit. Col.* 16: eNB03.

21. Soto-Calderón ID, Acevedo-Garcés YA, Restrepo-Agudelo T, Llinás-Guerrero JC, Rivillas-Puello Y, López JB. (2018). Phenotypic, Genetic, and Cytogenetic evidence of Hybridization Between Species of Trans-Andean Tamarins (Genus *Saguinus*). *Int. J. Primat.* 39:1022-1038.

22. Soto-Calderón ID, Acevedo-Garcés, Y. A., Restrepo-Agudelo, T., Llinás-Guerrero, J. C., Rivillas-Puello, Y., & López, J. B. (2019). Correction to: Phenotypic, Genetic, and Cytogenetic Evidence of Hybridization between Species of Trans-Andean Tamarins (Genus *Saguinus*). *Int. J. Primat.* 40 71-71.

23. Soto-Calderón ID. (2019). Conservación de Fauna Silvestre Urbana: El Reto de una Ciudad. *Experimenta.* 11: 40-45.

24. Trends in the Use of Studbooks in Captive Breeding Programs of Neotropical Primates.

25. Muñoz-Lora ML, Gómez-Cadenas K, Falla AC, Soto-Calderón ID. (Accepted). Neotropical Primates.

26. Population genetic structure of the Aberdeen Angus cattle breed in Colombia. (Accepted). Moreno-Sierra AM, Cerón-Muñoz MF, Soto-Calderón ID.

#### Oral Presentations

\* 34<sup>th</sup> Meeting of the Colombian Association of Biological Sciences. Cali, Colombia. October 27-30, 1999.

- \* 4<sup>th</sup> Colombian and 1<sup>st</sup> International Meeting of Genetics. Popayán, Colombia. February 21-25, 2000.
- \* 35<sup>th</sup> Meeting of the Colombian Association of Biological Sciences. Medellín, Colombia. October 10-13, 2000.
- \* 1<sup>st</sup> Symposium of Genetics and Molecular Biology. Neiva, Colombia. February 16-17, 2001.
- \* "Human Genome and Complex Traits". In: 2nd Journeys of the College of Neuropsychopharmacology of the Litoral". Santa Fe, Argentina. August 16-17, 2001.
- \* "Genetics for Medical Doctors". In: 2nd Journeys of the College of Neuropsychopharmacology of the Litoral". Santa Fe, Argentina. August 16-17, 2001.
- \* 38<sup>th</sup> Meeting of the Colombian Association of Biological Sciences. Armenia, Colombia. October 7-10, 2003.
- \* 8<sup>th</sup> Colombian and 5<sup>th</sup> International Meeting of Genetics. Barranquilla, Colombia. February, 2004.
- \* "Isolation, characterization and population genetic analysis of nuclear integrations of mitochondrial DNA (NUMTs) in African great apes". In: Gulf Coast Conservation Biology Symposium. Audubon Center for Research of Endangered Species. New Orleans, LA, USA. October 2, 2008.
- \* "Factors affecting the relative abundance of nuclear copies of the mitochondrial control region (Numts) in great apes". In: Evolution Meeting. University of Oklahoma. Norman, OK, USA. June 17-21, 2011.
- \* "Factors affecting the relative abundance of nuclear copies of the mitochondrial control region (Numts) in great apes". In: Third Symposium of the Colombian Network of Evolutionary Biology. Medellín, Colombia. July 26, 2011.
- \* "Distribution of the mitochondrial and nuclear genetic diversity in social groups of the Colombian endemic primate (*Saguinus leucopus*).". In: 1<sup>st</sup> Conservation Genetics Latin American Meeting. Macuto, Vargas State, Venezuela. May 5-9, 2014.
- \* "Captive populations and preservation of the genetic diversity of threatened species: The case of lowland gorillas in U.S. zoos." In: 1<sup>st</sup> Conservation Genetics Latin American Meeting. Macuto, Vargas State, Venezuela. May 5-9, 2014.
- \* "Controversial aspects of human sexuality: "Aberrant" cultural behaviors or biological elements of our Species?" In: 4<sup>th</sup> Seminar of History and Philosophy of Science. Medellín, Colombia. April 15-17, 2015.
- \* "Population Genetic Structure of the White-footed Tamarin (*Saguinus leucopus*) and Implications for Conservation". In: 38<sup>th</sup> Annual Meeting of the American Society of Primatologists. Bend, Oregon, USA. June 18-21, 2015.
- \* Population Genetic Structure of the White-footed Tamarin (*Saguinus leucopus*) and Implications for Conservation". In: 5<sup>th</sup> Colombian Symposium of Evolutionary Biology. Armenia, Quindío, Colombia. August 5-6, 2015.
- \* "Threats and conservation of the 'Mono Tití Paisa' (*Saguinus leucopus*) in the Metropolitan Area of Medellín." In: Forum: Conservation of the White-footed Tamarin. Medellín, Antioquia, Colombia. November 27, 2015.

- \* "Research for Conservation." In: Ibero-American Sustainability Week. Medellín, Antioquia, Colombia. April 21, 2016.
- \* "Implementation of Genetic Tools for Conservation of Primates in Colombia." In: 14<sup>th</sup> Colombian and 8<sup>th</sup> International Meeting of Human Genetics (Conservation Genetics Symposium). Bucaramanga, Santander, Colombia. October 27-29, 2016.
- \* "Conservation Biology of the White-footed tamarin (*Saguinus leucopus*)." In: 4<sup>th</sup> Workshop of Welfare and Management of the White-footed tamarin: Advances in Research and Conservation. Girardot, Cundinamarca, Colombia. December 5-8, 2016.
- \* "Biology and Conservation of Primates." In: Mondays of Science, School of Exact and Life Sciences, University of Antioquia. July 17, 2017.
- \* "Conservation Genetics of the White-footed tamarin (*Saguinus leucopus*): A heavily trafficked primate in Colombia." In: 3<sup>rd</sup> Latin American Meeting of Primatology. Xalapa, Veracruz, Mexico. October 28 - November 1, 2017.
- \* "Trends in the Use of Studbooks for Ex situ Conservation of Neotropical Primates." In: 5<sup>th</sup> Colombian Meeting of Zoology. Bogotá, Colombia. December 3-7, 2018.
- \* "The Challenge of Conservation in Urban Settings: Experience with the White-footed Tamarin (*Saguinus leucopus*) in Medellín." In: 5<sup>th</sup> Colombian Meeting of Zoology. Bogotá, Colombia. December 3-7, 2018.
- \* "Phenotypic, Genetic and Karyotypic Evidence of Hybridization between Trans-Andean Species of Tamarin (Genus *Saguinus*)." In: 5<sup>th</sup> Colombian Meeting of Zoology. Bogotá, Colombia. December 3-7, 2018.
- \* "Alternatives for Conservation of the White-footed tamarin and other Heavily Trafficked Primates." In: Update Journey on Mammal Conservation. Medellín, Colombia. December 16. 2019.
- \* "The Urban Tamarin: Conservation Experience at the University of Antioquia." In: Mondays of Science, School of Exact and Life Sciences, University of Antioquia. February 24, 2017.

#### Posters, Videos and Abstracts

1. "Lack of Association between a Serotonin Transporter Promoter Polymorphism and BPl in Antioquia, Colombia". Ospina-Duque J, Duque C, Carvajal-Carmona L, Cuartas M, Ortiz-Barrientos D, Soto I, Pineda N, Calle J, López C, Ochoa L, García J, Gómez J, Agudelo A, lozano M, Montoya G, Ospina A, López M, Gallo A, Miranda A, Serna L, Montoya P, Palacio C, Bedoya G, McCarthy M, Reus V, Freimer N and Ruiz Linares A. The American Journal of Medical Genetics 96 (4): 490. In: Eighth World Congress on Psychiatric Genetics. Versailles, France. August 27-31. 2000.
2. "Polimorfismos Genéticos en los Murciélagos de la Especie *Myotis nigricans*". (Genetic Polymorphisms in the Bat Species *M. nigricans*). G Gámez, ID Soto, D Ortiz, J Muñoz, G Bedoya and A Ruiz. IATREIA 13 (2): 110. In: 1st National Symposium of Basic Biomedical Sciences. University of Antioquia. Medellín, Colombia. June 1-3. 2000.
3. "Estudio de Simulación en 7 familias con Acidosis Tubular Renal Distal y Sordera Neurosensorial". (A Simulation Study in 7 families with Distal Tubular Renal Acidosis and Neurosensorial Deafness). LM Serna, JJ Vanegas, G Bedoya, LG Carvajal, ID Soto, J Pérez and A Ruiz. IATREIA 13 (2): 112.

In: 1st National Symposium of Basic Biomedical Sciences. University of Antioquia. Medellín, Colombia. June 1-3. 2000.

4. "mtDNA Diversity of Colombian Amerind Populations". MM Torres, D Ortiz-Barrientos, ID Soto, LG Carvajal, C Duque, G Bedoya, H Groot de Restrepo, A Ruiz-Linares. The American Journal of Human Genetics 67: 216. In: 50th Annual Meeting of the American Society of Human Genetics. Philadelphia, Pennsylvania, USA. October 3-7. 2000.

5. "A Comparison of Autosomal, mtDNA and Y-chromosome Diversity in Native South Americans". N mesa, MC Mondragon, ID Soto, MV Parra, C Duque, D Ortiz-Barrientos, JG Munera, LF Garcia, ID Velez, G Bedoya, MC Bortolini, A Ruiz-Linares. The American Journal of Human Genetics 67: 230. In: 50th Annual Meeting of the American Society of Human Genetics. Philadelphia, Pennsylvania, USA. October 3-7. 2000.

6. "Lack of Association between a Serotonin Transporter Promoter Polymorphism and Bipolar Disorder in Antioquia, Colombia". J Ospina-Duque, C Duque, L Carvajal-Carmona, D Ortiz-Barrientos, I Soto, N Pineda, M Cuartas, J Calle, C Lopez, L Ochoa, J Garcia, A Miranda, L Serna, P Montoya, C Palacio, G Bedoya, M McCarthy, V Reus, N Freimer, A Ruiz-Linares. The American Journal of Human Genetics 67: 239. In: 50th Annual Meeting of the American Society of Human Genetics. Philadelphia, Pennsylvania, USA. October 3-7. 2000.

7. "MtDNA Sequence Diversity in Antioquia (Colombia)". Ruiz-Linares A, Soto I, Duque C, Ospina J, Bedoya G, Carvajal-Carmona LG. The American Journal of Human Genetics 69 (4): 1247. In: 51st Annual Meeting of the American Society of Human Genetics. San Diego, California, USA. October 12-16. 2001.

8. "Genetic Diversity and Population Structure of Two Historically Related Latin-American Populations". Carvajal-Carmona LG, Ophoff R, Service S, Soto I, Hartiala J, Bedoya G, Ospina J, Reus V, Freimer NB, Ruiz-Linares A. The American Journal of Human Genetics 69 (4): 1384. In: 51st Annual Meeting of the American Society of Human Genetics. San Diego, California, USA. October 12-16. 2001.

9. "Inbreeding in Eastern Antioquia (Oriente), Colombia". Soto-Calderón I, Montoya P, Ospina J, Bedoya G, Ruiz-Linares A. The American Journal of Human Genetics 69 (4): 1414. In: 51st Annual Meeting of the American Society of Human Genetics. San Diego, California, USA. October 12-16. 2001.

10. "La Población Colombiana: Encuentro Genético de Dos Mundos" (The Colombian Population: Genetic Merge of Two Worlds). Ruiz-Linares A, Ospina-Duque C, Soto ID, Bedoya G, Palacio C, García J, Calle J, López C, Ochoa LG, Carvajal LG, Cuartas M, Ortiz-Barrientos D, Pineda N, Gómez J, Agudelo A, Lozano MC, Montoya G, López MC, Gallo A, Miranda A, Serna L, Montoya P, Duque C, Múnera A. Rev. Col. Psiqu. 30 (3): 283-284. Note in section: "Revista de Revistas" (Journal of Journals). 2001.

11. "Historia y Genética del Poblamiento de Marinilla y su Zona de Influencia". (History and Genetics of the Peopling of Marinilla and Related Zone). ID Soto, C López, P Montoya, J Ospina, G Bedoya and A Ruiz. IATREIA 14 (4): 315. In: 1st Inter-university Journeys of Biomedical Research. University of Antioquia. Medellín, Colombia. October 31 - November 1-2. 2001.

12. "Genetic Structure of a Culturally Conserved Afro-Colombian Population." I. Soto-Calderon, J. Lopera, MC. Mondragon, Y. Caicedo, L.

Caraballo, G. Bedoya, A. Ruiz-Linares. In: 54th Annual Meeting of the American Society of Human Genetics. Toronto, Canada. October 26-30. 2004.

13. "Analysis of the Variability and the Genetic Structure of Four Threatened Species of *Dugandiodendron* (Magnoliaceae) in the Corantioquia jurisdictional Area by Amplified Fragments Length Polymorphisms (AFLPs)." In: 39<sup>th</sup> Meeting of the Colombian Association of Biological Sciences. Ibagué, Tolima, Colombia. October 12-15. 2004.

14. "Historical and Genetic Assessment of a Genetic Isolate in North-West Colombia." G. Bedoya, I. Soto-Calderon, J. Lopera, P. Montoya, V. Alvarez, A. Ruiz-Linares. In: 54<sup>th</sup> Annual Meeting of the American Society of Human Genetics. Toronto, Canada. October 26-30. 2004.

15. "Patterns of Insertion and Nucleotide Substitution of Nuclear Translocations of mitochondrial DNA in Great Apes." Soto-Calderón ID, Lee E, Jensen-Seaman MI, Anthony NM. In: Annual meeting of the Society for Molecular Biology and Evolution. University of Iowa, Iowa city, Iowa, USA. June 3-7. 2009.

16. "Relative Abundance of Nuclear Copies of the Mitochondrial Control Region in Great Apes". Soto-Calderón I, Lee EU, Jensen-Seaman M, Anthony N. In: NHLBI Mitochondrial Biology Symposium. National Institutes of Health. Bethesda, MD, USA. May 16-17. 2011.

17. "Multi-step Approach to Generation of mtDNA-free nuclear DNA from Nonhuman Primate Cells". Colvin AM, Carnahan-Craig SJ, Soto-Calderón ID, Anthony NM, Jensen-Seaman MI. In: Mid-West Ecology and Evolution Conference. University of Cincinnati, Cincinnati, OH, USA. March 23-25. 2012.

18. Geographic representation of the western gorilla diversity in USA zoos." Soto-Calderón ID, Dew L, Jensen-Seaman M, Anthony N. In: Annual Meeting of the American Society of Primatologists. San Juan, Puerto Rico. June 19-23. 2013.

19. "Blood values and parasitic infections of wild populations of the white-footed tamarin (*Saguinus leucopus*)." Soto-Calderón ID, Acevedo-Garcés YA, García-Montoya GM, Hernández-Castro C. In: Annual Meeting of the American Society of Primatologists. San Juan, Puerto Rico. June 19-23. 2013.

20. "Distribución de la diversidad genética mitocondrial y nuclear del tití gris (*Saguinus leucopus*) en Poblaciones Naturales del Departamento de Antioquia". (Distribution of the mitochondrial and nuclear genetic diversity of the White-Footed Tamarin [*S. leucopus*] in Free-range Populations in the Antioquia Department). Soto-Calderón ID, Acevedo-Garcés YA. In: 4<sup>th</sup> Colombian Zoology Meeting. Cartagena, Colombia. December 1-5, 2014.

21. "Evaluación Clínica, nutricional y comportamental de tití gris (Primates: *Saguinus Leucopus*) en un Contexto Urbano de Medellín". (Clinical, Nutritional and Behavioral Evaluation of the White-Footed Tamarin [Primates: *S. leucopus*] in the Urban Context of the City of Medellín). Soto-Calderón ID, Acosta-Madrigal T, Jurado-Gutiérrez AM, Restrepo-Monsalve L, Mesa-Alarcón V, Delgado-Villegas V. In: 4<sup>th</sup> Colombian Zoology Meeting. Cartagena, Colombia. December 1-5, 2014.

22. "Valoración clínica y parasitológica del tití gris (Callitrichidae: *Saguinus leucopus*) en Poblaciones Naturales en el Departamento de Antioquia (Colombia)". (Clinical and Parasitological Assessment of Free-

Range populations of the White-Footed Tamarin [*S. leucopus*] in the Antioquia Department [Colombia]). Acevedo-Garcés YA, Álvarez-Cardona J, Vargas-Valencia V, Hernández-Castro C, García-Montoya GM, Soto-Calderón ID. In: 4<sup>th</sup> Colombian Zoology Meeting. Cartagena, Colombia. December 1-5, 2014.

23. "Distribución actual del primate tití gris (*Saguinus leucopus*) en El Casco Urbano de Medellín y el Valle de Aburrá (VA)." (Current Distribution of the White-Footed Tamarin [*S. leucopus*] in the Urban Area of the City of Medellín and the Aburrá Valley). Gómez-Cadenas K, Acevedo-Garcés Y, Tamayo-Millán CJ, Tabares-Vélez S, Soto-Calderón ID. In: 4<sup>th</sup> Colombian Zoology Meeting. Cartagena, Colombia. December 1-5, 2014.

24. "Evidencias de hibridación entre especies de tamarinos (género *Saguinus*)." (Evidence of Hybridization between tamarin species [Genus *Saguinus*]). Soto-Calderón ID, Acevedo-Garcés YA, Restrepo-Agudelo T, Llinás-Guerrero JC, Rivillas-Puello Y, López JB. In: 3<sup>rd</sup> Latin American Meeting of Primatology. Xalapa, Veracruz, Mexico. October 28 - November 1. 2017.

25. "Taxonomía molecular y prevalencia del parásito *Trypanosoma* en poblaciones Naturales del Primate Tití Gris (*Saguinus leucopus*)." (Molecular Taxonomy and Prevalence of the Parasite *Trypanosoma* in Wild Populations of the primate White-footed Tamarin [*Saguinus leucopus*])." Tabares-Medina J, García JM, Soto-Calderón ID. In: 3<sup>rd</sup> Colombian Meeting of Leishmaniasis and Chagas Disease. Medellín, Colombia. March, 2018.

26. "Genome-wide SNP loci reveal effects of habitat fragmentation on silvery brown tamarin (*Saguinus leucopus*) population structure." Valencia LM, Acevedo-Garcés YA, Soto-Calderón ID, Di Fiore A. In: 87<sup>th</sup> Annual Meeting of the American Association of Physical Anthropologists. Austin, Texas, USA. April 11 - 14. 2018.

27. "Molecular diagnosis of the Nancy Ma's Night monkey (*Aotus nancymae*) and mitochondrial genetic diversity in free-range and captive populations in Loreto, Peru." Moreno-Sierra AM, Soto-Calderón ID, Peralta-Aguilar A, Inga-Díaz G, Sánchez-Perea N, Maldonado AM. In: 2<sup>nd</sup> Peruvian Meeting of Primatology. Lima, Peru. August 14-17, 2019.

#### Funded Grants

\* "A Search for Genetic Polymorphisms in the species *Myotis nigricans* (Chiroptera: Vespertilionidae). University of Antioquia. US\$5,000. Co-investigator. 1999.

\* "Historical and Genetic Assessment of the Origin of the Population of Marinilla and Colonization Area". University of Antioquia. US\$8.300. Bank of the Republic US\$6,500. Master Student. 2000.

\* "Genetic Structure of the Current Population of San Basilio de Palenque". University of Antioquia. US\$4,800. Principal Investigator. 2002.

\* "Analysis of the Variability and the Genetic Structure of Four Threatened Species of *Dugandiodendron* (Magnoliaceae) by Using AFLPs". Corantioquia US\$5,300. University of Antioquia US\$2.800. Principal Investigator. 2003.

\* Graduate Enhancement award. Dept. Biological Sciences. UNO. 2008. US\$500. [Declined]



- \* Graduate Enhancement award. Dept. Biological Sciences. UNO. 2009. US\$1,000.00.
- \* "Structure and Genetic Composition of the White-footed Tamarin *Saguinus leucopus* in Antioquia Department". University of Antioquia. US\$16,000. Principal Investigator. 2012.
- \* "Monitoring of several vertebrate populations of endemic and endangered species occurring in the Hydroelectric Plants of Jaguas and San Carlos in Eastern Antioquia". ISAGEN. US\$103,000 Co-Investigator. 2012.
- \* "Ecology and urban population dynamics of White-footed tamarin *Saguinus leucopus*, the primate endemic to North-West Colombia." University of Antioquia. US\$37,000. Principal Investigator. 2013.
- \* "Young Investigator" award. Colciencias. US\$7,800. Principal Investigator. 2013.
- \* "Genetic characterization of free-range population of the White-footed tamarins in eastern Caldas, Colombia." Corpocaldas. US\$7,500. Principal Investigator. 2015.
- \* "Morphological, genetic and cytogenetic variation of heavily trafficked primates in central and western Colombia." (Stage 1)." Área Metropolitana del Valle de Aburrá. US\$18,560. Principal Investigator. 2017.
- \* "Identification of terrestrial and flying species of mammals present in the Gomez creek basin, Medellín, Colombia." Medellín municipality. US\$3,400. Principal Investigator. 2017.
- \* "Bi-national strategy for the conservation of the genus *Aotus* at the Colombian - Peruvian border." The Rufford Foundation. US\$21,300. Coinvestigator. 2017.
- \* "Processing of Biodiversity and Ecosystemic Services in River Basins of Interest for Generation of Electric Power by Empresas Públicas de Medellín." Empresas Públicas de Medellín. US\$3,078,300. Coinvestigator. 2017.
- \* "Morphological, genetic and cytogenetic variation of heavily trafficked primates in central and western Colombia." (Stage 2)." Área Metropolitana del Valle de Aburrá. US\$5,400. Principal Investigator. 2018.
- \* "Genetic Assessment and Conservation of Highly Trafficked Primates in Colombia: The case of the Red Howler Monkey." University of Antioquia. US\$16,000. Principal Investigator. 2018.

#### Awards and Honors

- \* Dean's List 1994, 1998, 1999. School of Natural and Exact Sciences. University of Antioquia.
- \* Teaching Assistant. Laboratory of Zoology. Biology Department. University of Antioquia, Medellín, Colombia. 1996.
- \* "Young Investigator" award to undergraduate students. University of Antioquia. 1997.
- \* Scholarship in the Course: Techniques in Molecular Genetics for Conservation and Manage of Biodiversity. International Center for Tropical Agriculture and Humboldt Institution. Palmira, Colombia. 1998.

- \* "Mention of Honor" for undergraduate research project: "Evolutionary Study of the Colombian Amerind Populations from RFLPs of mtDNA". School of Natural and Exact Sciences, University of Antioquia. 1999.
- \* "Mention of Honor" for Best undergraduate research project. 34th Meeting of the Colombian Society of Biological Sciences. Cali, Colombia. 1999.
- \* "Student Investigation Award of the University of Antioquia". Area: Health Sciences". First Place, 1999.
- \* Best Presentation award, category Genetics and Biotechnology. The 35th Meeting of the Colombian Society of Biological Sciences. Medellín, Colombia. 2000.
- \* "Investigation Award of the University of Antioquia" for best publication "Strong Amerind/White Bias and a Possible Sephardic Contribution among the Founders of a Population in Northwest Colombia [Am. J. Hum. Genet. 67 (5): 1287-1295]". 2001.
- \* "Honorary Member" of the Society of Neuropsychopharmacology of the Litoral, Argentina.
- \* "Mention of Honor" from Foundation Alejandro Ángel-Escobar for the research "Genetic Diversity of the Colombian Population: A New Perspective about Our History and Implications for the Medicine in Colombia". Award of Sciences, Foundation Alejandro Ángel-Escobar. 2001.
- \* "Award Héctor Ortega-Arbeláez" for best publication in the Revista Colombiana de Psiquiatría, by the article entitled: "Loci Genéticos Asociados al Trastorno Bipolar: Estudios en Población Colombiana. [30 (3): 239-247. 2001.]" (Genetic Loci associated with Bipolar Disorder: A Study in the Colombian Population). 2002.
- \* Public Competition of Merits for new faculty. University of Antioquia, 200 years. 2002. Commission for doctoral studies. Biology Institute. University of Antioquia, Medellín, Colombia. 2003-present.
- \* Doctoral scholarship, ALBAN Program, European Commission. University of Ferrara, Ferrara, Italy. 2004. [Declined]
- \* Crescent City Scholarship for doctoral studies, University of New Orleans. 2005-2009.
- \* Teaching Assistant. Contemporary Lab. University of New Orleans. 2005-2007; 2011.
- \* Research Assistant. Nicola Anthony's Lab. University of New Orleans. 2007-2011.
- \* Fellowship for Summer School in Statistical Genetics. Raleigh, North Carolina. May 2005.
- \* Dee Saunders Dundee Memorial Award in the area of Ecology and Evolutionary Biology. University of New Orleans, 2011.
- \* Member of the Evaluation Committee. Faculty positions in Evolution at the Industrial University of Santander (UIS). September, 2013.
- \* Member of the Evaluation Committee. Best Undergraduate Research Award - Otto de Greiff. August, 2016.

#### Former and Current Students

*Doctoral Students:*

Acevedo-Garcés, Yuliet Andrea. (Current). Conservation Genetics of the White-footed Tamarin *Saguinus leucopus* (Family: Cebidae). Biology Institute. Medellín. University of Antioquia.

*MSc Students:*

\* Acevedo-Garcés, Yuliet Andrea. 2015. Genetic Composition and Veterinary Valoration of Wild Populations of the White-footed tamarin (*Saguinus leucopus*). Biology Institute. Medellín. University of Antioquia.

\* Ramírez-Guerra, Natalia. 2016. Phylogenetic Characterization of the Tortoise *Cryptochelys leucostoma postinguinale* (Testudines: Kinosternidae). School of Agricultural Sciences. Medellín. University of Antioquia.

\* Herrera-Pérez, Juliana. (Current). Genetic Structure and Diversity of *Brycon henni* (Eigenmann 1913) at Different Scales in the Cauca River Basin.

\* Moreno-Moreno, Alejandra María. (Current). Genetica and Phylogeographic Assessment of the Red Howler Monkey (*Alouatta seniculus*) in Colombia. Biology Institute. Medellín. University of Antioquia.

\* Holguín-Osorio, Martín. (Current). Monitoring of Biodiversity Using Non-Lethal Methods: Metabarcoding of ichthyofauna in Andean Environments.

*Undergraduate Students:*

\* Sáenz Pablo. 2002. Analysis of the Genetic Variability and Population Structure of Four Threatened Species of *Dugandiodendron* (Magnoliaceae) through AFLPs. Biology Institute, University of Antioquia. Medellín.

\* Vargas-Valencia, Vanesa. 2014. Undergraduate Research: Description of the Endoparasite Diversity of the White-Footed Tamarin (Callithrichidae: *Saguinus leucopus*) in Three Environments: Urban, Rural and Captivity. Biology Institute, University of Antioquia. Medellín.

\* Londoño-Díaz, Natalia. 2014. Undergraduate Research: Optimization of an Automated Relatedness Test for Bovine Cattle SENEPOL and Buffalo. Biology Institute, University of Antioquia. Medellín.

\* Gil-Tobón, Carlos Andrés. 2015. Distribution of the Genetic Diversity of *Enterolobium cyclocarpum* (Fabaceae) in a Tropical Dry Forest of Colombia. Biology Institute, University of Antioquia. Medellín.

\* Franco-Gutiérrez, Lady Johana. 2015. Implementation of a Molecular Sexing Method in the Great Green Macaw (Psittacidae: *Ara Ambiguus*) and other Species in the Genus *Ara*. Biology Institute, University of Antioquia. Medellín.

\* Tabares-Vélez, Santiago. 2015. A Contrast of the Mitochondrial Genetic Diversity of the Red Howler Monkey (*Alouatta seniculus*) in Captivity and the Wild and Implications in Conservation. Biology Institute, University of Antioquia. Medellín.

\* Tamayo-Millán, Carlos. 2015. Evaluation of the Genetic Response of the White-footed Tamarin (*Saguinus leucopus*) to Habitat Fragmentation Caused by Urbanization Processes in the Aburrá Valley. Biology Institute, University of Antioquia. Medellín.

\* Tabares-Medina, Juliana. 2016. Molecular Taxonomy and Prevalence of the parasite *Trypanosoma* in Wild Populations of White-footed tamarin (*Saguinus leucopus*). Biology Institute, University of Antioquia. Medellín.

- \* Martínez-Rivera, Leidys Johanis. 2016. Evaluation of the Gastrointestinal and Hematological Parasite Community of the White-footed tamarin (Cebidae: *Saguinus leucopus*) in North Antioquia Department. Biology Institute, University of Antioquia. Caucaasia.
- \* Muñoz-Mora, Maria Laura. 2016. Status of ex- situ conservation programs of neotropical primates and the importance of studbooks. University EAFIT. Medellín.
- \* Botero-Ospina, Érika Andrea. 2018. Monitoring of release actions of primates: Conservation and education in an urban environment. University of Quindío. Armenia.
- \* Moreno-Sierra, Alejandra María. 2018. Evaluation the genetic diversity and population structure of Aberdeen angus - new type in contrast to Scottish Aberdeen angus - old type in the departments of Huila y Cundinamarca - Colombia. Biology Institute, University of Antioquia. Medellín.
- \* Saldarriaga-Ramírez, Juan David. 2019. Phylogenetic position, genética variation and conservation status of the Medellín's carbonero tree (*Calliandra medellinensis*). Biology Institute, University of Antioquia. Medellín.
- \* García-Blandón, Katherine. 2020. Molecular identification and diagnosis of *Trypanosoma* spp. in wild and captive populations of non-human primates from North West Colombia. Biology Institute, University of Antioquia. Medellín.
- \* Mejía-Estrada, Manuela. (Current). Implementation of a Genetic Barcode Approach for the Ichthyology Collection of the University of Antioquia. Biology Institute, University of Antioquia. Medellín.
- \* Salazar-Meneses, Maria Fernanda. (Current). Assessment of Potential Hybridization between the Howler Monkey Species *Alouatta palliata* and *Alouatta seniculus* in a Contact Zone in Northwest Colombia. Biology Institute, University of Antioquia. Medellín.
- \* Ávila-García, Ana María. (Current). Illustrated Guide to Mammals of the University of Antioquia campuses in Medellín.

Journal Peer Reviewer

- \* Actualidades Biológicas
- \* African Journal of Biotechnology.
- \* American Journal of Primatology.
- \* BMC Genetics.
- \* Ecology & Evolution.
- \* Genetica.
- \* Journal of Basic and Clinical Physiology and Pharmacology.
- \* Revista Colombiana de Ciencias Pecuarias.
- \* Revista Colombiana de Entomología.
- \* Revista Veterinaria y Zootecnia - Universidad de Caldas.
- \* Tropical Conservation Science.

June 8, 2020.