

L. FRANCISCO HENAO-DIAZ

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Field of Research

Evolutionary biology, macroevolution, phylogenetic comparative methods, diversification, biogeography, forest ecology, animal ecology.

EDUCATION

2017 – 2022 Ph.D. University of British Columbia, Vancouver, Canada
2011 – 2012 M.Sc. Universidad de Los Andes, Bogotá D.C., Colombia
2007 – 2010 B.Sc. Universidad de Los Andes, Bogotá D.C., Colombia

EMPLOYEMENT

December 2022 - now	Chicago Postdoctoral Fellow, University of Chicago
May 2021 – December 2021	Graduate Research Internship, World Wildlife Fund – US
June 2017 – September 2017	Graduate Research Assistant, Universidad de los Andes
March 2017 – June 2017	Botanist and team leader in treeline - páramo transition zone at La Colosa, Cajamarca (Tolima), Fundación Guayacanal
October 2016 – January 2017	Botanist at the Biologic characterization southern Serranía de San Lucas, Wildlife Conservation Society (WCS) - Colombia
June 2015 – May 2016	Primatologist group leader in ecological study for environmental compensation pipeline oil San Fernando system, Salgado Meléndez & Asociados
April – May 2015	Botanist at the Biologic characterization southern Serranía de San Lucas, Wildlife Conservation Society (WCS) – Colombia

October 2014 – February 2015	Project Manager treeline-páramo transition zone at Chingaza Complex Páramo, Universidad de Los Andes
December 2014 – January 2015	Mammalogist at Corocora (ODL) oil station Fundación Omacha
December 2013 – February 2014	Data Compiler, Institute of biological Resources Alexander von Humboldt

AWARDS AND HONOURS (excluding scholarships)

2022W	President's Academic Excellence Initiative PhD Award
2021	CSEE Excellence in Doctoral Research Award
2021S	President's Academic Excellence Initiative PhD Award
2020W	President's Academic Excellence Initiative PhD Award
2020S	President's Academic Excellence Initiative PhD Award
2020	Vicki Funk Student Travel Award

PUBLICATIONS

PEER-REVIEWED JOURNALS

19. Stevenson, P.R., Acosta-Rojas, D.C., Cardenas, S. & **Henao-Diaz, L. F.** Fruit and seed morphology is better explained by dispersal system than by leaf size in a Tropical rainforest. Accepted at *American Journal of Botany*
18. Rolland, J., **Henao-Diaz, L. F.**, Doebeli, M., Germain, R., Harmon, L. J., Knowles, L. L., Liow, L. H., Mank, J.E., Manchac, A., Otto, S.P., Pennell, M. W., Salamin, N., Silvestro, D., Sugawara, M., Uyeda, J., Wagner, C. E. & Schluter, D. Bridging the gaps between Micro- and Macroevolution. Accepted at *Nature Ecology and Evolution*
17. **Henao-Diaz, L. F.** & Pennell, M. The Major Features of Macroevolution. Accepted at *Systematic Biology*.
16. Brodie, J., **Henao-Diaz, F.**, Pratama, B., Wheeler, T., Copeland, C. & Helmy, O. E. Trait assembly in insular communities: filtering rather than in situ evolution determines fruit sizes in Indo-Malayan trees. In press at *The American Naturalist*
15. Louca, S., **Henao-Diaz, L. F.** & Pennell, M. The scaling of diversification rates with age is likely explained by sampling bias. *Evolution*. 76 (7), 1625-1637

14. Stevenson, P. R., Cortés, C., Reyes, R., Paramero, R., Uni, J. F., Peña-Núñez, J. L. & **Henao-Díaz, L. F.** (2022). Avifauna asociada a bosques primarios y secundarios del Parque Nacional Natural Cueva de Los Guácharos, Colombia. *Actualidades Biológicas*. 44(116), 1-18.
13. Harmon, L. J., Pennell, M. W., **Henao-Díaz, F.**, Rolland, J., Siple, B. & Uyeda, J. C. (2021) The Causes and consequences of the ubiquitous time-scaling of all evolutionary rates. *Annual Review of Ecology and Systematics*. 52, 587 – 609
12. Germain, R. M., Hart, S. P., Turcotte, M. M., Otto, S. P., Sakarchi, J., Rolland, J., Usui, T., Angert, A. L., Schluter, D., Bassar, R. D., Waters, M. T., **Henao-Díaz, F.**, & Siepielski, A. M. (2020) On the Origin of Coexisting Species. *Trends in Ecology & Evolution* 36(4), 284 - 293
11. **Henao-Díaz, F.** et al. (2020) Atlas de la biodiversidad de Colombia. Primates. Instituto de Investigación de Recursos Biológicos Alexander von Humboldt. Bogotá D.C., Colombia. 51 pp.
10. **Henao-Díaz, L. F.** & Sinclair, A. R. E. (2020). Long term monitoring of Serengeti bird species occurrence, abundance, and habitat. *Ecology* 101 (2)
9. **Henao Díaz, L. F.**, Harmon, Sugawara, M. T., L. J., Miller, E., & Pennell, M. W. (2019). Reply to Wiens and Scholl: The time dependency of diversification rates is a widely observed phenomenon. *PNAS* 116(49), 24401
8. **Henao Díaz, L. F.**, Harmon, L. J., Miller, E., Sugawara, M. T., & Pennell, M. W. (2019) Macroevo-lutionary diversification rates show time-dependency. *PNAS* 116(15), 7403-7408
7. **Henao Díaz, F.**, Arroyo, S., Cárdenas-Posada, G., Fernández, M., López, J. P., Martínez, D. C., Mendoza, J. S., Mondragón-Botero, A., León, O., Pulido-Herrera, K. L., Rodríguez-Cerón N. & Madriñán, S. (2019). Caracterización biológica en la zona de transición bosque-páramo del Complejo de Páramos Chingaza, Colombia. *Biota Colombiana*, 20 (1)
6. Stevenson P. R., Cardona, L., Acosta-Rojas, D., **Henao-Díaz, F.** & Cardenas, S. (2017) Diet of Oilbirds in Cueva de Los Guácharos National Park (Colombia): temporal variation in dispersal quantity, fruit choice and seed morphology. *Neotropical Ornithology*. 28, 295 - 307
5. Stevenson, P. R., M. A. Ramírez, L. F. Casas & **F. Henao-Díaz**. (2017) Forestación de bosques en sabanas de la altillanura colombiana: relevancia de las condiciones ambientales para el establecimiento de plántulas. *Biota Colombiana* 18 (Suplemento 1): 99-109.
4. Aldana, Ana M., Villanueva, B., Cano, Á., Correa-Gómez, Diego F., Umaña María N., Casas, Luisa F., Cárdenas, S., **Henao-Díaz, F.** & Stevenson P.R. (2017) Drivers of biomass stocks in Northwestern South American forests: complementing information for the Neotropics. *Forest Ecology and Management*.

3. Casas, L., Aldana, A. **Henao-Díaz, F.** & Stevenson P.R. (2017) Specific gravity of woody tissue from lowland Neotropical plants. *Ecology*. 98 (5)
2. **Henao-Díaz, F.** & Stevenson P.R. (2015) Neutral Theory Overestimates Extinction Times In Non-Human Primates. *International Journal of Primatology*. 36(4), 790-801.
1. **Henao-Díaz, F.**, Pacheco-Fernandez, N., Argüello-Bernal, S. Moreno-Arocha, M.M. & Stevenson P. (2012) Patrones de diversidad de Epífitas en Bosques de Tierras Bajas y Subandinos. *Colombia Forestal*. 15(2)

MANUSCRIPTS SUBMITTED OR IN REVIEW

Arenas-Castro, H. et al Academic publishing requires linguistically inclusive policies. Submitted to *PNAS*

OTHER PUBLICATIONS

- Cruz-Rodríguez, C., Noguera-Urbano, E.A., Olaya-Rodríguez, M.H., **Henao-Díaz, L.F.**, Guzmán-Caro, D.C., Ochoa Quintero, J.M. & Stevenson, P. (2020). Primates y deforestación en Colombia. En: Moreno, L. A. & Andrade, G. I. (Eds.). Biodiversidad 2019. Estado y tendencias de la biodiversidad continental de Colombia. Bogotá, D. C., Colombia: Instituto de Investigación de Recursos Biológicos Alexander von Humboldt. 92p.
- Stevenson P.R, Zárate D. A., Ramirez M. A. & **Henao-Díaz, F.** (2015) Social interactions and proximal spacing in woolly monkeys: lonely females looking for male friends? In: *Dispersing Primate Females: Life History and Social Strategy in Male-Philopatric Groups*. Furuichi T., Yamagiwa J. & Aureli F. (eds) pp 45 – 71.

White paper

Gomez, P., **Henao Díaz, F.** & Henao Esteban. (2023). Debunking Financial Inclusion in the US-Latam remittance market Counting clicks to measure inclusion.

INVITED TALKS

Francisco Henao Díaz, Luke J. Harmon & Matthew W. Pennell, 2019. Explaining the Major Features of the Tree of Life with Process-based Models. Evolution Meeting.

Henao-Díaz, F. 2015. *Plant characterization in forest-páramo transition at Chingaza Páramo Complex*. VIII Colombian Congress of Botany. Symposium: From forest to páramo, transitions and adaptations in high mountain vegetation.

Contributed talks and presentations

Carretero-Pinzón, X., Cortés-Rincón, J., Gómez-Posada, C., Hernández, A., Linero, D., Luna, V., Rojas-Bejarano, N., Zárate, D. & **Henao-Díaz, F.** 2022. An evaluation of fragmentation threats of Colombian primate species by región using IUCN-CMP unified classification of direct threats. International Primatological Society Congress.

Olaya-Rodríguez, María H., **Henao-Díaz, Luis Francisco**, Guzmán-Caro, Diana C., Cortés-Rincón, Juliana, Arcniegas-Moreno, Nicolás, Buitrago, Leonardo & Velásquez-Tibatá, Jorge. 2018. *Modelos de distribución de los primates de Colombia: resultados de un trabajo abierto y colaborativo*. V Congreso Colombiano de Zoología. IV Simposio Colombiano de Primatología.

Francisco Henao Díaz, Luke J. Harmon, Mauro Sugawara and Matthew W. Pennell. 2018. *Young clades appear to be diversifying faster: meta-analysis of speciation rates reveals ubiquitous age-dependent effects*. 3rd Standalone Society for Systematic Biologists meeting.

Stevenson P., Cardona, L., Acosta, D. **Henao, L.** & Cardenas S. 2017. *Diet of oilbirds in southern Colombia: temporal variation, fruit choice and seed morphology*. 54th Annual Meeting of the Association for Tropical Biology and Conservation.

Trevisi, H., **Henao-Díaz, F.**, Ebert, D. & Berking, M. 2017. *Development and validation of effective self-support questionnaire (ESSQ)*. 10th Workshop Congress of Clinical Psychology and Psychotherapy. 35 Symposium of Clinical Professional CP and PT of Deutsche Gesellschaft der Psychologie. German Society of Psychology.

Cardona, L., Link, A., **Henao-Díaz, F.**, Acosta-Rojas, D., Cardenas, S. & Stevenson P. 2016. *Frugivory diet and oil bird's (Steatornis caripensis) potential role as seed dispersers: A case of study in Cueva de los Guácharos National Park (Huila, Colombia)*. V Colombian Congress of Ornithology. Symposium Birds and ecosystem functions: differential views and ecological roles of birds.

- Acosta-Rojas, Diana, **Henao-Díaz, F** & Madriñán S. 2015. *Aril Ancestral State Reconstruction in Leguminosae: Was right Edred John Corner?* VIII Colombian Congress of Botany. II Symposium in Colombian Leguminosae studies, from local to global levels.
- Henao-Díaz, F.**, Cardenas-Hoyos, S., Acosta-Rojas. D. & Stevenson P. 2014 *Oilbird (Steatornis caripensis) diet and seed dispersal at the National Park Cueva de los Guácharos*. II Symposium of animal behavior in Colombia. 4th Colombian Zoology Congress.
- Stevenson P.R, Zárate D. A., Ramirez M. A. & **Henao-Díaz, F**. 2014. *Social interactions and proximal spacing in woolly monkeys: lonely females looking for male friends?* III Colombian Symposium of Primatology. 4 Colombian Zoology Congress.
- Carlos José Pardo-De la Hoz, **Francisco Henao-Díaz**, Silvia Restrepo, Natalia Vargas. 2014. *First taxonomic and distribution approach of the lichens from the páramo of the Natural National Park Chingaza, Colombia*. Symposium: Advances in Lichenology in Latin America. VIII Latino American Congress of Mycology.
- Pablo R. Stevenson, Diego F. Correa, Luisa F. Casas, **L. Francisco Henao**, David F. Góngora, L. Carolina Lagos, Sofía Arguello, Ana M. Aldana & Antonio Quiñones. 2014. *Avances en el diagnóstico de los servicios ecosistémicos de la Reserva Biológica y Productiva Tomogrande, Vichada (Colombia)*. II Colombian Congress of protected Areas.

TEACHING

2021 Winter	Teaching Assistant: Fundamentals of Biostatistics, University of British Columbia.
2020 Fall	Teaching Assistant: Phylogenetic Biology, University of British Columbia.
2014-I	Adjunct Professor: General Botany (Laboratory), Universidad de Los Andes
2012-II	Teaching Assistant: Thinking the History of Art, Universidad de Los Andes
2012- II	Tutor: Spanish Writing Center, Universidad de Los Andes
2011-II	Teaching Assistant: Biodiversity, Conservation and Development, Universidad de Los Andes
2011-II	Tutor: Spanish Writing Center, Universidad de Los Andes
2010-II	Monitor: Ecology Laboratory, Universidad de Los Andes

SCHOLARSHIPS

2022 – present Chicago Fellowship
2020 - 2022 Computational Biodiversity Science and Services (BIOS²) Fellow
2017 - 2021 International Doctoral Fellowship
2012 Teaching Assistance Spanish Write Center
2011 Teaching Assistance Spanish Write Center

GRANTS AND FUNDING

2022 Chicago Fellowship (US \$ 20000)
2014 Basic Sciences Project (USD \$20000)
2012 Primate Conservation Inc. (USD \$1700)
2011 Seed Research Project. Universidad de los Andes (USD \$1100)

WORKING GROUPS

2023 Biodiversity along elevation and productivity gradients. Beaty Biodiversity Research Centre, UBC. (*Invited participant*)
2022 Insights from Macro-Ecology and Macro-Evolution for Biodiversity Assessment Schoodic Institute, Winter Harbour, ME
2021 L’impact des changements climatiques sur les peits cours d’eau du Québec G3E-BIOS2, Virtual
2019 Coexistence and evolutionary timescales. Beaty Biodiversity Research Centre, UBC. (*Invited participant*)
2019 Potential links between micro and macroevolution. Beaty Biodiversity Research Centre, UBC. (*Invited participant*)

WORKSHOPS

2021 Summer School in Biodiversity Modelling – Evaluating Models with Ecological Data. USherbrooke, QC.
2019 Nantucket phylogeny developer. UMass. Nantucket, MS.

- 2019 Introduction to Julia. UBC-Vancouver.
- 2018 How to publish and use Biodiversity Data. Canadensys. UBC-Vancouver.
- 2018 Introduction to Bayesian Stan Modeling Language. UBC-Vancouver.
- 2018 Arbor workflows, Visual workflows for phylogenetic comparative methods Arbor Cornell University, Ithaca, NY.
- 2018 Animal movement analyses: A to Z, with lots of R. British Ecological Society Movement Ecology Special Interest Group. UBC-Vancouver.
- 2016 Calidad de Datos. Sistema de Información Biológica (SiB – Colombia). Bogotá
- 2015 I Taller de Validación BioModelos de Distribución Primates. Instituto Alexander von Humboldt. Bogotá D.C.
- 2015 PÁRAMOS SIN LÍMITES: Comprendiendo la transición páramo-bosque. Aportes de la investigación en flora y fauna para la gestión de la alta montaña colombiana. Instituto Alexander von Humboldt. Montenegro, Quindío.

MEDIA

- 2020 *El Espectador*: <https://www.elespectador.com/noticias/medio-ambiente/listo-el-primer-atlas-de-primates-de-colombia/>
- Semana Sostenible*: <https://sostenibilidad.semana.com/medio-ambiente/articulo/donde-habitan-los-primates-en-colombia-colombia-hoy/53161>
- 2019 *Science Daily*: <https://www.sciencedaily.com/releases/2019/03/190326160455.htm>
- 2018 *El Espectador*: <https://www.elespectador.com/noticias/medio-ambiente/el-mapa-de-primates-que-120-personas-ayudaron-a-construir/>

OUTREACH

- 2022 Patterns in Evolution: <https://www.youtube.com/watch?v=QX4RIDVIBWw>
- The Living Data Project: <https://www.youtube.com/watch?v=BfsVS7DVX-g>

PROFESSIONAL SERVICE

COMMITTEES

- 2023 ASN Representative for the joint ASN, SSE, and ESE meeting Montreal 2024
- 2020 – 2021 Grad student representative in the Biodiversity Data Scientist Faculty Search Committee
- 2014 Scientific committee member III Colombian Symposium of Primatology. IV Colombian Zoology Congress. Cartagena.

MANUSCRIPT REVIEWER

Evolution, J Biogeography, Methods in Ecology and Evolution, PLoS Biology, Proceeding of Royal Society B, Revista de Biología Tropical, Revista de la Academia Colombiana de Ciencias Exactas, Físicas y Naturales

LANGUAGES

Native: Spanish. **Fluent:** English. **Beginner:** French