**Marina B. Blanco Duke Lemur Center**

Research Scientist  **3705 Erwin Road; Durham NC, 27705**

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**Education**

National University of La Plata, Argentina Licenciatura 1998 Anthropology

University of Massachusetts, Amherst MA 2004 Anthropology

University of Massachusetts, Amherst PhD 2010 Anthropology

**Personal Statement**

During my early career I researched a variety of topics, including health and diet of prehistoric human populations of Argentina, the role of heterochrony in primate evolution, and the reproductive biology of small-bodied nocturnal lemurs in Madagascar. During the last decade, I have focused my research on the ecophysiology of hibernation in dwarf lemurs (genus *Cheirogaleus*), the only obligate hibernators within primates. During this time, my collaborators and I have documented the timing and duration of hibernation in a variety of dwarf lemur species and habitats in Madagascar, reported underground hibernation in eastern dwarf lemurs, documented evidence of sleep-like states during arousals from hibernation bouts, and confirmed metabolic depression, including drastic changes in heart and respiratory rates during lemur hibernation. Over the last years, I have been leading the Hibernation Program at the Duke Lemur Center (DLC), Durham, NC. My current goals include integrating experimental and ecological studies at the DLC and in Madagascar to better understand extreme metabolism in cheirogaleids.

**Positions and Employment**

2019-present Research Affiliate, Biology Department, Duke University, Durham

2016-present Research Scientist, Duke Lemur Center, Duke University, Durham

2012-2015 Postdoctoral Associate, Duke Lemur Center, Duke University, Durham

2013-4 Postdoctoral Fellow, Department of Animal Ecology & Conservation, University Hamburg, Germany

2011-2 Adjunct Postdoctoral Research Associate, Department of Anthropology, University of Massachusetts, Amherst

2011-2 Visiting Scholar, Department of Anthropology, Dartmouth College, Hanover

**Selected papers**

2022 **Blanco, M.B.**, Greene, L.K., Klopfer, P.H., Lynch, D., Browning, J., Ehmke, E.E. and A.D. Yoder. Body mass and tail girth predict hibernation expression in captive dwarf lemurs. *Physiological and Biochemical Zoology*. 95(2):122-129.

2021 **Blanco, M.B.**, Greene, L.K., Schopler, R. et al. On the modulation and maintenance of hibernation in captive dwarf lemurs. *Scientific Reports* 11: 5740.

2021 Greene, L.K., Rambeloson, E., Rasoanaivo, H., Foss, E.D., Yoder, A.D., Drea, C.M. and **Blanco MB**. The gut microbiota of four lemur species living in a dry forest during lean times. *International Journal of Primatology* 42(6): 961-979.

2021 Rambeloson, E., Andriambeloson, J.B., Rasoanaivo, H.A., Ramarokoto, R.E., Prosper, P., de Foucault, C., Greene, L.K., **Blanco, M.B.** Initial translocation and reintroduction of the aye-aye (*Daubentonia madagascariensis*) in the Anjajavy Reserve, Northwestern Madagascar. *Folia Primatologica* doi: 10.1159/000520332.

2021 Andriambeloson, J.B., **Blanco, M.B.**, Andriantsalohimisantatra, A., Rivoharison, T.V., Walker, N., Birkinshaw, C., Yoder, A.D. Living in tiny fragments: a glimpse at the ecology of Goodman's mouse lemurs (*Microcebus lehilahytsara*) in the relic forest of Ankafobe, Central Highlands, Madagascar. *Primates* 62(6):887-896.

2020 **Blanco, M.B.**, Greene, L.K., Rasambainarivo, F. *et al.* Next-generation technologies applied to age-old challenges in Madagascar. *Conservation Genetics* 21: 785–793.

2020 Andriambeloson, J.B., Greene, L.K., **Blanco, M.B.** Prolonged torpor in Goodman's mouse lemur (*Microcebus lehilahytsara*) from the high-altitude forest of Tsinjoarivo, central-eastern Madagascar. *Folia Primatologica* 91(6):697-710.

2020 **Blanco, M.B.**, Rudman, A., Greene, L.K., Razafindrainibe, F., Andrianandrasana, L., Welch, C. Back to basics: Gaps in baseline data call for revisiting an Environmental Education program in the SAVA region, Madagascar. *PLoS ONE*, 15: e02331822.

2019 **Blanco, M.B.**, Greene, L.K., Davis, L.J., Welch, C. Fuel use and cookstove preference in Madagascar’s SAVA region. *Madagascar Conservation and Development.*14: 12-18.

2018 **Blanco, M.B.**, Dausmann, K.H., Faherty, S.L., Yoder, A.D. Tropical heterothermy is "cool": the expression of daily torpor and hibernation in primates. *Evolutionary* *Anthropology* 27: 147-161.

2018 Faherty, S.L., Villanueva-Cañas, J.L., **Blanco, M.B.**, Alba, M.M., Yoder, A.D. Transcriptomics in the wild: hibernation physiology in free-ranging dwarf lemurs. *Molecular* *Ecology* 27(3):709-722.

2017 **Blanco, M.B.**, Andriantsalohimisantatra, A.A., Rivoharison, T.V., Andriambeloson, J.B. Evidence of prolonged torpor in Goodman’s mouse lemurs at Ankafobe forest, central Madagascar. *Primates* 58: 31-37.

2016 **Blanco, M.B.**, Dausmann, K.H.,Faherty, S.L., Klopfer, P., Krystal, A.D., Schopler, R., Yoder, A.D. Hibernation in a Primate: Does sleep occur? *Royal Society Open Science* 3: 160282.

2015 **Blanco, M.B.,** Zehr, S. Striking longevity in a hibernating lemur. *Journal of Zoology* 296: 177-188.

2015 **Blanco, M.B.**, Rasoazanabary, E., Godfrey, L.R. Unpredictable environments, opportunistic responses: Reproduction and population turnover in two wild mouse lemur species (*Microcebus rufus* and *M. griseorufus*) from eastern and western Madagascar. *American Journal of Primatology* 77(9):936-947.

2014 **Blanco, M.B.**, Godfrey, L.R. Hibernation patterns of dwarf lemurs in the high altitude forest of eastern Madagascar. In: *High Altitude primates*, NB Grow, S Gursky-Doyen, A Krzton(eds.). Springer Developments in Primatology Series, Vol 44, Springer, New York, pp 23-42.

2013 **Blanco, M.B.**, Dausmann, K.H., Ranaivoarisoa, J.F., Yoder, A.D. Underground hibernation in a primate. *Scientific Reports* 3: 1768.

2013 **Blanco, M.B.**, Godfrey, L.R. Does hibernation slow the “pace of life” in dwarf lemurs (*Cheirogaleus* spp.)? *International Journal of Primatology* 34: 130-147.

2011 **Blanco, M.B**. Timely estrus in wild brown mouse lemur females at Ranomafana National Park, southeastern Madagascar. *American Journal of Physical Anthropology* 145(2):311-317.

2010 Groeneveld, L.F., **Blanco, M.B.**, Raharison, J-L., Rahalinarivo, V., Kappeler, P.M., Godfrey, L.R., Irwin, M.T. mtDNA and nDNA corroborate existence of sympatric dwarf lemur species at Tsinjoarivo, eastern Madagascar. *Molecular Phylogenetics and Evolution* 55: 833-845.

2009 **Blanco, M.B.**, Meyer, J.S. Assessing reproductive profiles in female brown mouse lemurs (*Microcebus rufus*) from Ranomafana National Park, southeast Madagascar, using fecal hormone analysis. *American Journal of Primatology* 71(6):439-46.

**Selected Research Support**

2020 Trent Fund, project “Reproduction, Metabolomics, Longevity, and Telomeres: the role of hibernation” (PI; Co-PI: Peter Klopfer).

2018 Duke Microbiome Center, project “Extreme metabolism in primates: A comparative study of the gut microbiome and metabolome across active and hibernating lemurs” (PI; Co-PIs: Lydia Greene, Erin Ehmke, Thomas O’Connell, Anne Yoder)

 Global Wildlife Conservation, project “Next-generation lemur conservation: Applying real-time genomics techniques to the discovery of cheirogaleids in the private Anjajavy Reserve” (PI; CoPIs: Lydia Greene, Peter Larsen, Anne Yoder)

2016 CI Primate Action Fund Grant, project “Landscape use in *Microcebus* sp. and *Cheirogaleus* sp. at Ankafobe forest, central Madagascar: dispersal across micro-forests?”

2012 DFG (Deutsche Forschungsgemeinschaft) Grant, project “Ecophysiology, ecology and evolution of tropical hibernation” (Cooperation Partner; PI: Kathrin Dausmann)

2011 Margot Marsh Biodiversity Foundation Grant, project “Effects of forest fragmentation on the ecology of hibernation and population dynamics of dwarf lemurs (*Cheirogaleus sibreei* and *C. crossleyi*) at Tsinjoarivo, Madagascar”

 Primate Conservation Inc. Renewal Grant, project “Biology of two sympatric dwarf lemur populations (*Cheirogaleus sibreei* and *C. crossleyi*) in the high-altitude forests of Tsinjoarivo, eastern Madagascar”

American Association of Physical Anthropologists Professional Development Grant, project “First assessment of minimum life span in wild dwarf lemurs by dental topographic analysis”