Curriculum Vitae: Mitchell T. Irwin

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Web: www.sadabe.org/lrwin/index.html

Citizenship: Canadian

Education / Academic Appointments

2015 - present: Associate Professor, Dept. of Anthropology,

Northern Illinois University, DeKalb, IL, USA

2012 - 2015: Assistant Professor, Dept. of Anthropology,

Northern Illinois University, DeKalb, IL, USA

2016 - present: Associate Member (Graduate Faculty), Dept. of Biological Sciences

Northern Illinois University, DeKalb, IL, USA

2013 - present: Associate Member, Institute for the Environment, Sustainability and Energy

Northern Illinois University, DeKalb, IL, USA

2010 - 2012: Visiting Academic, School of Biological Sciences,

University of Queensland, Brisbane, QLD, Australia

2008 - 2010: Postdoctoral Research Associate, Redpath Museum,

McGill University, Montreal, QC, Canada

2006 - 2008: NSERC Postdoctoral Fellow (Advisor: Dr. Colin Chapman),

Dept. of Biology, McGill University, Montreal, QC, Canada

1998 - 2006: Interdepartmental Doctoral Program in Anthropological Sciences,

Stony Brook University; Concentration: Primate Ecology and Conservation

MS: May 2001

PhD: May 2006, "Ecological Impacts of Forest Fragmentation on Diademed Sifakas

(Propithecus diadema) at Tsinjoarivo, Eastern Madagascar: Implications for

Conservation in Fragmented Landscapes"

Recipient, President's Award to Distinguished Doctoral Students (2006)

1994 - 1998 University of Toronto (& Queen's University), Toronto/Kingston, Ontario, Canada

BSc (Honours, with high distinction); GPA: 4.00

Primary Research Foci

- Effects of Habitat Disturbance on Physiological Health and Behaviour of Primates: Implications for Socioecology and Conservation. I use observational techniques, physiologic health assessments, nutritional analyses of foods, endoparasite assessments and endocrinology to investigate mechanisms through which forest fragmentation and disturbance affect the ecology, behavior, mobility and health of wild primates. These data can provide good tests for socioecological theory (i.e., effects of resource density and patchiness), as well as improving conservation planning. Currently efforts focus on nutritional ecology and parasitology.
- Effects of Habitat Disturbance on Lemur Community Ecology. I use census methods and population
 ecology to examine changes in species richness and abundance across habitat disturbance and
 fragmentation gradients.

Peer-Reviewed Publications

My research output has been 46 publications in peer-reviewed journals or scholarly books since 2000 (average 2.6 per year). This 17-year period spanned 6 years before the awarding of my PhD and 11 years after. My primatology / physical anthropology papers have been published in discipline-leading journals: American Journal of Physical Anthropology (2012 Impact Factor: 2.481), American Journal of Primatology (2.459), and International Journal of Primatology (1.786), and PlosOne (3.234), and collaborative works have been published in Science (33.611) and PNAS (9.674). My papers in biological journals include medium- to high- ranking journals such as Biological Conservation (3.794), Molecular Phylogenetics and Evolution (4.066), Biotropica (2.351), Journal of Mammalogy (2.308), and Animal Conservation (2.692). My work has been well-cited by leaded researchers in the field: my 68 ISI-listed articles and published abstracts have been cited 767 times (h-index = 18; author identifier A-1482-2012, ORCID 0000-0003-2088-0028).

- 46. **Irwin MT**, Raharison JL (in press) Interpreting small-scale patterns of ranging by primates: What does it mean, and why does it matter? In: GPS and GIS for Primatologists: A Practical Guide (C. Shaffer, F Dolins, J. Hickey, L. Porter & N. Nibbelink, eds.). Cambridge: Cambridge University Press.
- 45. Rakotomalala JE, Proctor S, Rakotondravony D, Rakotondraparany F, Raharison JL, **Irwin MT** (2017) Influence des caractéristiques forestières et des perturbations anthropogéniques sur la distribution des lémuriens de la forêt classée d'Ankadivory (Tsinjoarivo-Ambatolampy). Malagasy Nature 12:16-31.
- 44. Kistler L, Johnson SM, **Irwin MT**, Louis EE, Ratan A, Perry GH (2017) A massively parallel strategy for STR marker development, capture and genotyping. Nucleic Acids Research. DOI: 10.1093/nar/gkx574
- 43. Meador LR, Godfrey LR, Rakotondramavo J-C, Ranivoharimanana L, Zamora A, Sutherland MR, **Irwin MT** (2017) *Cryptoprocta spelea*: What did it eat and how do we know? Journal of Mammalian Evolution
- 42. Jacobs RL, MacFie TS, Spriggs AN, Baden AL, Morelli TL, **Irwin MT**, Lawler RR, Pastorini J, Mayor M, Lei R, Culligan R, Hawkins MTR, Kappeler PM, Wright PC, Louis Jr. EE, Mundy NI, Bradley BJ (2017) Novel and highly polymorphic colour vision in the diurnal, largest-bodied extant lemurs. Biology Letters 13. DOI: 10.1098/rsbl.2017.0050.
- 41. Kappeler PM, Cuozzo FP, Fichtel C, Ganzhorn JU, Gursky-Doyen S, **Irwin MT**, Ichino S, Lawler R, Nekaris KA, Ramanamanjato J-B, Radespiel U, Sauther ML, Wright PC, Zimmerman E (2017) Longterm field studies of lemurs, lorises and tarsiers. Journal of Mammalogy 98:661-669.
- 40. **Irwin MT**, Raharison JL, Junge RE, Chapman CA, Rothman JM (2017) Minerals in the foods and diet of diademed sifakas: Are they nutritional challenges? American Journal of Primatology. DOI: 10.1002/ajp.22623 (*featured article*)
- 39. Miller RT, Raharison JL, **Irwin MT** (2017) Competition for dead trees between humans and aye-ayes (*Daubentonia madagascariensis*) in central eastern Madagascar. Primates 58:367-375. DOI: 10.1007/s10329-016-0585-4
- 38. Ganzhorn J, Arrigo-Nelson S, Carrai V, Chalise M, Donati G, Dröscher I, Eppley T, **Irwin M**, Koch F, Koenig A, Kowalewski M, Mowry C, Patel E, Pichon C, Ralison J, Reisdorff C, Simmen B, Stalenberg E, Starrs D, Terboven J, Wright P, Foley W (2017) The importance of protein in leaf selection of folivorous primates. American Journal of Primatology. DOI: 10.1002/ajp.22550
- 37. Jacobs RL, Spriggs A, MacFie TS, Baden AL, **Irwin MT**, Wright PC, Louis Jr. EE, Lawler RR, Mundy NI, Bradley BJ (2016) Primate genotyping via High Resolution Melt Analysis (HRMA): Rapid and reliable identification of color vision status in wild lemurs. Primates 57:541-547.
- 36. **Irwin MT** (2016) Habitat change: Loss, fragmentation and degradation. In: An Introduction to Primate Conservation (Wich S, and Marshall A, eds.). Oxford: Oxford University Press.

- 35. **Irwin MT**, Raharison JL, Raubenheimer D, Chapman CA, Rothman JM (2015) The nutritional geometry of resource scarcity: Effects of lean seasons and habitats on nutrient intakes and balancing in a wild sifaka. Plos One 10(6):e0128046. doi:10.1371/journal.pone.0128046
- 34. Yildirim S, Yeoman CJ, Janga, SC, Thomas SM, Ho M, Leigh SR, **Primate Microbiome Consortium**, White BA, Wilson BA, Stumpf RM (2014) Primate vaginal microbiomes exhibit species specificity without universal *Lactobacillus* dominance. International Society for Microbial Ecology Journal 8:2431-2444. doi:10.1038/ismej.2014.90
- 33. Schwitzer C, Mittermeier RA, Johnson SE, Donati G, **Irwin M**, Peacock H, Ratsimbazafy J, Razafindramanana J, Louis Jr. EE, Chikhi L, Colquhoun IC, Tinsman J, Dolch R, LaFleur M, Nash S, Patel E, Randrianambinina B, Rasolofoharivelo T, Wright PC (2014) Averting lemur extinctions amid Madagascar's political crisis. Science 343:842-843.
- 32. Pontzer H, Raichlen DA, Gordon AD, Schroepfer-Walker KK, Hare BA, O'Neill MC, Muldoon KM, Dunsworth HM, Wood BM, Isler K, Burkart J, **Irwin M**, Shumaker RW, Lonsdorf EV, Ross SR (2014) Primate energy expenditure and life history. Proceedings of the National Academy of Sciences (USA) 111:1433-1437.
- 31. **Irwin MT**, Raharison JL, Raubenheimer D, Chapman C, Rothman J (2014) Nutritional correlates of the "lean season": Effects of seasonality and frugivory on the nutritional ecology of diademed sifakas. American Journal of Physical Anthropology 153:78-91.
- 30. Crowley BE, Blanco MB, Arrigo-Nelson SJ, **Irwin MT** (2013) Stable isotopes document resource partitioning and effects of forest disturbance on sympatric cheirogaleid lemurs. Naturwissenschaften 100:943-956.
- 29. Samonds KE, Godfrey LR, Ali JR, Goodman SM, Vences M, Sutherland MR, **Irwin MT**, Krause DW (2013) Imperfect isolation: Factors and filters shaping Madagascar's extant vertebrate fauna. PLoS ONE 8(4):e62086.
- 28. Godfrey LR, Schwartz GT, Jungers WL, Catlett KK, Samonds KE, King SJ, Muldoon KM, **Irwin MT**, Burney DA (2013) Life history variation in Madagascar's giant extinct lemurs. In: Leaping Ahead: Advances in Prosimian Biology (J. Masters, M. Gamba & F. Genin, eds.). New York: Springer, pp. 51-59.
- 27. Ratsimbazafy HJ, Arrigo-Nelson SJ, Dollar LJ, Feistner ATC, Holmes CM, **Irwin MT**, Johnson SE, Stevens NJ, Wright PC (2013) Conservation of prosimians in Madagascar: A view from the great red island. In: Leaping Ahead: Advances in Prosimian Biology (J. Masters, M. Gamba & F. Genin, eds.). New York: Springer, pp. 387-396.
- 26. Samonds KE, Godfrey LR, Ali JR, Goodman SM, Vences M, Sutherland MR, Irwin MT, Krause DW (2012) Spatial and temporal arrival patterns of Madagascar's vertebrate fauna explained by distance, ocean currents, and ancestor type. Proceedings of the National Academy of Sciences (USA) 109:5352-5357.
- 25. Crowley BE, Thorén S, Rasoazanabary E, Barrett MA, Zohdy S, Blanco MB, McGoogan KC, Arrigo-Nelson SJ, **Irwin MT**, Vogel ER, Wright PC, Radespiel U, Godfrey LR, Koch PL, Dominy NJ (2011) Explaining geographical variation in the isotope composition of mouse lemurs (*Microcebus*). Journal of Biogeography 38:2106-2121.
- 24. Crowley BE, Godfrey LR, **Irwin MT** (2011) A glance to the past: Subfossils, staple isotopes, seed dispersal and lemur species loss in southern Madagascar. American Journal of Primatology 73:25-37.
- 23. Groeneveld LF, Blanco MB, Raharison JL, Rahalinarivo V, Rasolarison RM, Kappeler PM, Godfrey LR, **Irwin MT** (2010) MtDNA and nDNA corroborate existence of sympatric dwarf lemur species at Tsinjoarivo, eastern Madagascar. Molecular Phylogenetics and Evolution 55:833-845.

- 22. **Irwin MT**, Junge RE, Raharison JL, Samonds KE (2010) Variation in physiological health of Diademed Sifakas across intact and fragmented forest at Tsinjoarivo, eastern Madagascar. American Journal of Primatology 72:1013-1025. (*featured article*)
- 21. **Irwin MT**, Wright PC, Birkinshaw C, Fisher B, Gardner CJ, Glos J, Goodman SM, Loiselle P, Rabeson P, Raharison JL, Raherilalao MJ, Rakotondravony D, Raselimanana A, Ratsimbazafy J, Sparks J, Wilmé L, Ganzhorn JU (2010) Patterns of species change in anthropogenically disturbed forests of Madagascar. Biological Conservation 143:2351-2362.
- 20. Samonds KE, Zalmout I, **Irwin MT**, Krause DW, Rogers RR, Raharivony LL (2009) *Eotheroides lambondrano*, new middle Eocene seacow (Mammalia, Sirenia) from the Mahajanga basin, northwestern Madagascar. Journal of Vertebrate Paleontology 29:1233-1243.
- 19. **Irwin MT**, Raharison JL (2009) A review of the endoparasites of the lemurs of Madagascar. Malagasy Nature 2:66-93.
- 18. **Irwin MT**, Raharison JL, Wright PC (2009) Spatial and temporal variability in predation on rainforest primates: Do forest fragmentation and predation act synergistically? Animal Conservation 12:220-230.
- 17. Blanco MB, Godfrey LR, Rakotondratsima M, Rahalinarivo V, Samonds KE, Raharison JL, **Irwin MT** (2009) Discovery of sympatric dwarf lemur species in the high-altitude rainforest of Tsinjoarivo, eastern Madagascar: Implications for biogeography and conservation. Folia Primatologica 80:1-17.
- 16. Wright PC, Johnson SE, Irwin MT, Jacobs R, Schlichting PE, Lehman SM, Louis EE, Arrigo-Nelson SJ, Raharison JL, Rafalirarison RR, Razafindratsita V, Ratsimbazafy J, Ratelolahy FJ, Dolch R, Tan C (2008) The crisis of the critically endangered greater bamboo lemur (*Prolemur simus*). Primate Conservation 23:5-17.
- 15. **Irwin MT** (2008) Feeding ecology of diademed sifakas (*Propithecus diadema*) in forest fragments and continuous forest. International Journal of Primatology 29:95-115.
- 14. Johnson SE, Lei R, Martin SK, **Irwin MT**, Louis EE (2008) Does *Eulemur cinereiceps* exist? Preliminary evidence from genetics and ground surveys in southeastern Madagascar. American Journal of Primatology 70:372-385.
- 13. **Irwin MT** (2008) Diademed sifaka (*Propithecus diadema*) ranging and habitat use in continuous and fragmented forest: Higher density but lower viability in fragments? Biotropica 40:231-240.
- 12. Godfrey LR, **Irwin MT** (2007) The evolution of extinction risk: Past and present anthropogenic impacts on the primate communities of Madagascar. Folia Primatologica 78:405-419.
- Godfrey LR, Jungers WL, Schwartz GT, Irwin MT (2007) Ghosts and orphans: Madagascar's vanishing ecosystems. In: Elwyn L. Simons: A Search For Origins (J.G. Fleagle, C.C. Gilbert, eds.). New York: Springer, pp. 361-395.
- Irwin MT (2007) Living in forest fragments reduces group cohesion in diademed sifakas (*Propithecus diadema*) in eastern Madagascar, by reducing food patch size. American Journal of Primatology 69:434-447.
- 9. **Irwin MT**, Raharison JL, Rakotoarimanana H, Razanadrakoto E, Ranaivoson E, Rakotofanala J, Randrianarimanana C (2007) Diademed sifakas (*Propithecus diadema*) use olfaction to forage for the inflorescences of subterranean parasitic plants (Balanophoraceae: *Langsdorffia* sp., and Cytinaceae: *Cytinus* sp.). American Journal of Primatology 69:471-476.

- 8. **Irwin MT** (2006) Ecologically enigmatic lemurs: The sifakas of the eastern forests (*Propithecus candidus*, *P. diadema*, *P. edwardsi*, *P. perrieri* and *P. tattersalli*). In: Lemurs: Ecology and Adaptation (L. Gould & M. Sauther, eds.). New York: Springer, pp. 305-326.
- 7. **Irwin MT**, Johnson SE, Wright PC (2005) The state of lemur conservation in southeastern Madagascar: Population and habitat assessments for diurnal and cathemeral lemurs using surveys, satellite imagery and GIS. Oryx 39:204-218.
- 6. **Irwin MT**, Samonds KE, Raharison JL, Wright PC (2004) Lemur latrines: Observations of latrine behavior in wild primates and possible ecological significance. Journal of Mammalogy 85:420-427.
- 5. **Irwin MT**, Ravelomanantsoa HV (2004) Illegal rum production threatens health of lemur populations at Tsinjoarivo, eastern central Madagascar: Brief report and request for information. Lemur News 9:16-17.
- 4. Godfrey, LR, Samonds KE, Jungers WL, Sutherland MR, **Irwin MT** (2004) Ontogenetic correlates of diet in Malagasy lemurs. American Journal of Physical Anthropology 123:250-276.
- 3. **Irwin MT**, Samonds KE (2002) Range extension of the Madagascar Red Owl (*Tyto soumagnei*) in Madagascar: The case of a rare, widespread species? Ibis 144:680-683.
- 2. **Irwin MT**, Samonds KE, Raharison JL (2001) A biological inventory of the lemur community of Réserve Spéciale de Kalambatritra, south-central Madagascar. Lemur News 6:24-28.
- 1. **Irwin MT**, Smith TM, Wright PC (2000) Census of three eastern rainforest sites north of Ranomafana National Park: Preliminary results and implications for lemur conservation. Lemur News 5:20-22.

Peer-Reviewed Publications Submitted and in Preparation

- **Irwin MT**, Samonds KE, Raharison JL, Junge RE, Mahefarisoa KL, Rasambainarivo F, Godfrey LR, Glander KE (in revision) Reduced nutritional intakes in Diademed Sifakas occupying degraded habitat are reflected in morphometrics and growth and help identify habitat thresholds.
- **Irwin MT**, Tecot SR, Raharison JL (in prep.) Variation in fecal cortisol levels across habitats and seasons in *Propithecus diadema*.
- Jacobs RL, Veilleux CC, Louis Jr. EE, Frankel DC, **Irwin MT**, Melin AD, Bradley BJ (submitted) Variation in colour vision capacity among cathemeral lemurs (*Eulemur*) and the ecology of dichromacy.
- Semel BP, **Irwin MT**, Raharison JL, Chapman CA, Rothman JM, King RB (in prep.) A nutritional analysis of geophagy in diademed sifakas.
- Spencer L, DuBour A, Fitzpatrick M, Raharison JL, Semel B, **Irwin MT** (in prep.) Helminth parasites of lemurs at Tsinjoarivo, Madagascar.
- Rasolonjatovo SM, Irwin MT (in prep.) Dominance pattern in Diademed Sifaka (*Propithecus diadema*): inferences from social behaviors, leadership and feeding priority.
- **Irwin MT**, Raharison JL (in prep.) Ecosystem in decay: Factors influencing primate species extinctions in forest fragments of Tsinjoarivo, Madagascar.

Other Publications

Schwitzer C, Baker-Médard M, Dolch R, Golden C, Irwin M, Johnson S, Patel E, Raharivololona BM, Ratsimbazafy J, Razafindramanana J, Volampeno S (2013) Factors contributing to lemur population decline on a national scale, and proposed immediate and longer-term mitigation actions. In: Lemurs of Madagascar, A Strategy for their Conservation 2013-2016 (Schwitzer C, Mittermeier RA, Davies N, Johnson S, Ratsimbazafy J, Razafindramanana J, Louis Jr. EE, Rajaobelina S, eds.). Bristol, UK:

- IUCN SSC Primate Specialist Group, Bristol Conservation and Science Foundation, and Conservation International, pp. 34-51.
- **Irwin M**, Blanco M, Raharison JL, Samonds K (2013) Anjozorobe-Angavo & Tsinjoarivo.In: (Schwitzer C, Mittermeier RA, Davies N, Johnson S, Ratsimbazafy J, Razafindramanana J, Louis Jr. EE, Rajaobelina S, eds.). Bristol, UK: IUCN SSC Primate Specialist Group, Bristol Conservation and Science Foundation, and Conservation International, pp. 83-85.
- **Irwin MT** (2008) In it for the long haul: Impacts of seasonality on primates, primatologists and paleoanthropologists (Review of *Seasonality in Primates: Studies of Living and Extinct Human and Non-human Primates* by Brockman and van Schaik). American Journal of Primatology 70:711-714.
- **Irwin MT**, Samonds KE, Raharison FJL (2008) Transfert de Gestion: Beanana, Tsinjoarivo. Lemur News 13:7-10.
- **Irwin MT** (2004) A broad view of evolution: A symposium in honor of George Williams. Evolutionary Anthropology 13:201-202.
- **Irwin MT** (2002) The story of May, a courageous dwarf lemur. Newsletter of the International Primate Protection League 29:12-14.

Meeting Presentations

Since I began attending professional meetings in 1999, I have contributed to 60 meeting presentations. Of these, I was first author for 23. The meetings have included: American Association of Physical Anthropologists, American Society of Primatologists, International Primatological Society, and the Association for Tropical Biology and Conservation.

Symposia Chaired

- Arrigo-Nelson SJ, Ravahatramananjarasoa FN, **Irwin MT**, Zamora A (2016) Fifty years of sifakas: Evolutionary perspectives and conservation advances. Joint Meeting of the International Primatological Society and the American Society of Primatologists, Chicago, IL, USA.
- Arrigo-Nelson SJ, **Irwin MT**, Ratelolahy F (2006) Rainforest sifakas: Yesterday, today and tomorrow. Twenty-first Congress of the International Primatological Society, Entebbe, Uganda.

Awards

Oral Paper Award, American Society of Primatologists; best oral presentation by a student at the 28th annual meeting of the Society (August 17-20, 2005).

Invited Lectures

I have given 29 invited lectures from 2002 to present. Twelve of these have been research talks at academic seminar series (University of Queensland, Australian National University, Queensland University of Technology, Purdue University, University of North Carolina, McGill University, Concordia University, Hunter College, University of Quebec at Montreal, University of Calgary, and Mount Holyoke College).

Media Coverage

- 2016: NIU Newsroom (http://newsroom.niu.edu/2016/10/27/food-for-thought-anthropologist-mitch-irwin-to-study-diets-of-adorable-and-endangered-lemurs/, 27 October)
- 2014: NIU Today (http://www.niutoday.info/2014/02/20/lemur-conservation-crisis/, 20 February)
- 2014: NIU Today (http://www.niutoday.info/2014/01/14/niu-prof-helps-shed-light-on-primate-longevity/, 14
- 2013: NIU Today (http://www.niutoday.info/2013/10/07/something-wild/, 7 October)

- 2012: Totally Wild (Channel 10, National Television, Australia; http://ten.com.au/totally-wild-tw20-120.htm; 28 August)
- 2012: Totally Wild (Channel 10, National Television, Australia; http://ten.com.au/totally-wild-tw20-091.htm; 20 June)
- 2010: Découverte (Radio-Canada television program; http://www.radio
 - canada.ca/emissions/decouverte/2010-2011/Reportage.asp?idDoc=122723; 24 October).
- 2010: Daily Planet (Discovery Channel Canada television program; May 25).
- 2007: National Geographic News (http://news.nationalgeographic.com/news/2007/12/071224-mistletoe-research.html).
- 2006: "Wild Chronicles" Episode 205 (aired on PBS, Discovery Channel;
 - http://news.nationalgeographic.com/news/2006/11/061129-lemur-video.html).
- 2001: Toronto Star (newspaper)

Teaching Experience (Field)

Summer 2013, 2014,2015: Northern Illinois University, ANTH 493/593 Madagascar, Past and Present: Biodiversity, Extinction and Conservation (Study Abroad, Co-instructor)

Summer 2012: University of Massachusetts, Amherst, ANTH 493/593 Madagascar, Past and Present: Biodiversity, Extinction and Conservation (Study Abroad, Co-instructor)

Teaching Experience (Classroom)

Spring 2015, Spring 2017: Northern Illinois University, ANTH 790 Graduate Seminar

Fall 2014: Northern Illinois University, ANTH 491/591 Primate Social Behavior

Spring 2014, Fall 2015, Fall 2016: Northern Illinois University, ANTH 341 Primatology

Fall 2013, Spring 2016: Northern Illinois University, ANTH 491/591 Primates and Food

Fall 2013, Spring 2015, Fall 2016: Northern Illinois University, ANTH 240 Introduction to Physical Anthropology

Spring 2013, Fall 2014, Spring 2016: Northern Illinois University, ANTH 101 Human Origins

Fall 2012, Spring 2014, Fall 2015, Spring 2017: Northern Illinois University, ANTH 444/544 **Primate Ecology** and Conservation

Spring 2007, 2008, 2010: Concordia University, LOYC 320 Biodiversity on Earth

Spring 2008, 2010: Concordia University, LOYC 310 Science and the Contemporary World

Spring 2009, 2010: McGill University, REDM 400 Science and Museums (Secondary Instructor)

Spring 2002: Stony Brook University, ANP 420 GIS and Remote Sensing (Teaching Assistant)

Spring 2001: Stony Brook University, ANP 360 Primate Conservation (Teaching Assistant)

Spring 1999, 2000: Stony Brook University, ANT 104 Introduction to Archeology (Teaching Assistant)

Fall 1998, 1999: Stony Brook University, ANP 120 Introduction to Physical Anthropology (Teaching Assistant)

Teaching Awards

2017-18 Outstanding Teacher in Anthropology, NIU

Supervision of Student Research Projects (Sole supervisor unless otherwise noted)

2017 - Amanda Hamrick: MA research, NIU
2017 - Emma Thurau: MA research, NIU
2017 - Laurie Spencer: PhD research, NIU
2016 - Shallu Prasher: MA research, NIU

2016 - Vololona Rahalinarivo: PhD research (co-supervisor), University of Antananarivo

2015- Amanda DuBour: "Dietary constraints and strategies in the red-bellied lemur (eulemur

rubiventer), and their implications for conservation" MA research, NIU

2014-16 Meredith Keeley: "Patch-sharing in diademed sifakas and brown lemurs" Fieldwork

internship.

2014-present	Katie Heffernan: "Effects of habitat disturbance on the teeth of <i>Propithecus diadema</i> in the forests of Tsinjoarivo" PhD research, NIU
2014-15	Safidy Rasolonjatovo: "Patterns of female dominance in <i>Propithecus diadema</i> " MS research, University of Antananarivo
2014 -	Maharavo Razafindraseta: "Defecation habits and their impacts on the transmission of lemur parasites" MS research, University of Antananarivo
2014-16	Margaret Buehler: "Intersexual social interactions in <i>Cebus capucinus</i> " MA research, NIU (committee member)
2014-16	Jessica Ritsche: "Do folivores deplete patches? Feeding ecology of Costa Rican mantled howlers (Alouatta palliata)" MA research, committee member
2014-16	Xiaoying Zhong: " The phylogeny of <i>Homo erectus</i> " MA research, committee member
2013-15	Brandon Semel: "A multi-species approach to elucidating the ecological function of primate geophagy" MA research, NIU
2013-17	Laurie Spencer: "Prevalence and abundance of Cryptosporidium in lemurs, humans and domestic livestock at Tsinjoarivo" MA research, NIU
2013-16	Kim Foreit: "Leading behavior, positioning, and group spacing as indicators of dominance in <i>Hapalemur griseus</i> " MA research, NIU
2013	Kathryn Olson: "Parasite burden of sifakas occupying intact and degraded habitat" NIU Undergraduate Research Apprenticeship Program.
2012-14	Molly Fitzpatrick: "Effects of habitat change on <i>Hapalemur griseus</i> feeding ecology and parasite load". MA research, NIU.
2012-14	Anna Kordek: "Stress and Behavior of Male Bonobos in Groups of Varied Sex Ratio" MA research, NIU (committee member)
2012-14	Sylvia Orellana: "Balancing the Scales: Diurnal Temporal Variation in the Feeding and Foraging Patterns of Saguinus fuscicollis" MA research, NIU (committee member)
2013	Kim Lein: "Patterns of scentmarking in bamboo lemurs and sifakas". Undergraduate Independent Research supported by USOAR (NIU).
2011	Kelly O'Loughlin: "Patterns of scentmarking in gentle bamboo lemurs (Hapalemur griseus) at Tsinjoarivo, Madagascar". Independent Research Project
2011	Holiarimino Vololonoro: "Diet, ranging and behavior of gentle bamboo lemurs
2011	(Hapalemur griseus) at Tsinjoarivo, Madagascar". Masters student, University of
	Antananarivo (external advisor)
2010	Gabrielle Lupien: "Ontogeny of Infant Independence of Diademed Sifakas inhabiting
	Intact and Fragmented Forest at Tsinjoarivo, Madagascar". Internship, Vanier College, Montreal, QC, Canada.
2010	Jean-Elvis Rakotomalala: "Effects of Selective Logging on Lemur Communities at Tsinjoarivo, Madagascar". Masters student, University of Antananarivo (external advisor)
2010	Katrina Bélanger-Smith, Maryse Tadros: "Dental Wear Analysis of the Diademed Sifaka
	(<i>Propithecus diadema diadema</i>)". Independent Research Project, REDM 400 (Science & Museums), McGill University.
2009	Brian Gerber: "Carnivore Ecology in a Fragmented Landscape at Tsinjoarivo, Madagascar". MSc student at Virginia Tech (co-ordinated field logistics and contributed to
0000	research design).
2009	Andrea Reid, Madeline Cronin: "An exploration of parasites within fecal samples of critically endangered Diademed Sifaka (<i>Propithecus diadema diadema</i>)" Independent
2000 2010	Research Project, REDM 400 (Science & Museums), McGill University.
2009-2010	Sarah Proctor: "The impact of selective logging on Lemur communities at Tsinjoarivo, Madagascar." Student at University of York, Masters in Research of Environmental Management and Ecology.
2007-2008	Katie Bresner: "Investigating Parasitism in Sifakas in Continuous Forests and Forest
	Fragments in Tsinjoarivo Forest, Madagascar". Honours Thesis, Dept. of Anthropology, McGill University.
2007-2008	Tim Devlin: Independent study in Physical Anthropology (survey of the field and
	subfields). Dept. of Anthropology, McGill University (co-advisor).
2003-2004	Hasina Ravelomanantsoa: "Socioeconomics and Illegal Rum Production at Tsinjoarivo,
	Madagascar". MSc (DEA) student, University of Antananarivo.

2001-2003: Supervised Field Assistants in Madagascar. Trained and mentored 10 undergraduate field assistants in observational and data collection techniques during dissertation-related field work in Madagascar (average tenure per assistant: 5 months)

Research Grants and Fellowships (postgraduate)

Since I began actively leading research projects in 1999, I have been awarded US\$257,286 in external grant funding, a highly competitive 2-year NSERC postdoctoral fellowship from the government of Canada (total value: CAD80,000) and a multi-year grant to achieve legal forest protection at Tsinjoarivo.

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2017	Rainforest Trust (\$953,273 over 5 years): "Working with communities to protect the
	threatened high-altitude forest of Tsinjoarivo-Ambalaomby" (funding for the legal creation of a
	protected area; written by Irwin and submitted on behalf of the Malagasy NGO SADABE;
0040	jointly awarded to SADABE and Madagasikara Voakajy)
2016	National Geographic Society Committee for Research and Exploration (\$19,553):
	"Nutritional geometry, digestive constraints and limits to survival in two large-bodied lemur
00.10	species".
2016	Rasmussen Family Foundation (\$20,000): "Engaging local communities and conserving
	lemur populations at Tsinjoarivo, Madagascar".
2016	NIU Research & Artistry Grant (\$14,000): "Nutritional geometry, digestive constraints and
	limits to survival in two sympatric lemurs: Do different lemurs play by different nutritional
	rules?".
2015	Eppley Foundation for Research (\$23,008): "Digestive constraints, cathemerality and limits
	to survival in brown lemurs (Eulemur fulvus) of Madagascar's eastern rainforests"
2015	NIU Lilian Cobb Faculty Travel Fellowship (\$2000)
2014	NIU Open Access Publishing Support (\$1350)
2013	NIU Research & Artistry Grant (\$15,000): "Landscape ecology of the critically endangered
	greater bamboo lemur <i>Prolemur simus</i> : Towards an understanding of its patchy distribution".
2011	Field Research for Conservation Grant, St. Louis Zoo (\$10,000): "Health and physiology of
	threatened lemur populations at Tsinjoarivo, Madagascar: Linking biomedical health
	assessments with field primatology ". With Jean-Luc Raharison.
2011	Field Conservation Grant, St. Louis Zoo (\$3,062): "Location and habituation of high-altitude
	Prolemur simus at Tsinjoarivo, eastern Madagascar ". With Jean-Luc Raharison.
2011	Primate Conservation, Inc. (\$2,500): "Locating and habituating high altitude Prolemur simus
	at Tsinjoarivo, eastern Madagascar" (with Jean-Luc Raharison)
2009	Primate Action Fund (\$2,500): "Halting Politically-Induced Deforestation in the Short Term to
0000	Preserve the Unique Primate Community of Tsinjoarivo, Eastern Central Madagascar"
2009	Primate Conservation, Inc. (\$2,500): "Halting Politically-Induced Deforestation in the Short
0000	Term to Preserve the Unique Primate Community of Tsinjoarivo, Eastern Central Madagascar"
2009	National Geographic Society Committee for Research and Exploration (\$5,000):
	Supplemental Discretionary Funding. With Jean-Luc Raharison.
2007	National Geographic Society Committee for Research and Exploration (\$20,000):
	"Physiological Correlates of Habitat Degradation: A test with a Critically Endangered Primate".
0007	With Jean-Luc Raharison.
2007	Field Research for Conservation Grant, St. Louis Zoo (\$10,000): "Physiological correlates
	of habitat degradation: A test with a critically endangered primate, <i>Propithecus diadema</i> ". With
0007	Jean-Luc Raharison.
2007	Primate Action Fund (\$3,400): "Counteracting the Threat of Government-Sponsored Logging
0007	To Preserve the Unique Primate Community of Tsinjoarivo, Eastern Central Madagascar"
2007	Primate Conservation, Inc. (\$2,500): "Counteracting the Threat of Government-Sponsored
	Logging to Preserve the Unique Primate Community of Tsinjoarivo, Eastern Central
2000	Madagascar" Research Grant Manual Manual Biodiversity Foundation (\$20,000); "Building Considers and
2006	Research Grant, Margot Marsh Biodiversity Foundation (\$20,000): "Building Corridors and
	Conserving Forests at Tsinjoarivo, Eastern Central Madagascar: A Reforestation Initiative to
2006 2000	Link Forest Fragments and Monitor Lemur Populations". With Jean-Luc Raharison (renewal).
2006-2008	NSERC Postdoctoral Fellowship (PDF; 2 years, \$40,000CAD/year)

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2005	Research Grant, Margot Marsh Biodiversity Foundation (\$19,000): "Building Corridors and Conserving Forests at Tsinjoarivo, Eastern Central Madagascar: A Reforestation Initiative to Link Forest Fragments and Monitor Lemur Populations". With Jean-Luc Raharison.
2004	Research Grant, Margot Marsh Biodiversity Foundation (\$17,000): "Conserving Threatened Lemur Populations at Tsinjoarivo, Eastern Central Madagascar: Extended Regional Distribution Surveys and Population Monitoring of Sadabe, a Newly-Discovered Sifaka (<i>Propithecus diadema</i> ssp. nov.)". With Jean-Luc Raharison.
2003	Research Grant, Margot Marsh Biodiversity Foundation (\$16,000): "Lemur Population Dynamics in the Fragmented Forest of Tsinjoarivo, Eastern Central Madagascar, and Conservation of 'Sadabe', a Newly-Discovered Sifaka (<i>Propithecus diadema</i> ssp. nov)" (renewal)
2003	Research Grant, Primate Conservation, Inc. (\$1000): "Metapopulation Modeling of the Lemur Community in the Fragmented Forest of Tsinjoarivo, Eastern Central Madagascar" (renewal)
2003	Research Grant, International Primate Protection League (\$1000): "Lemur Population Dynamics in the Fragmented Forest of Tsinjoarivo, Eastern Central Madagascar, and Conservation of 'Sadabe', a Newly-Discovered Sifaka (<i>Propithecus diadema</i> ssp. nov)"
2002	Research Grant, Margot Marsh Biodiversity Foundation (\$25,000): "Lemur Population Dynamics in the Fragmented Forest of Tsinjoarivo, Eastern Central Madagascar, and Conservation of 'Sadabe', a Newly-Discovered Sifaka (<i>Propithecus diadema</i> ssp. nov)" (renewal)
2001	Research Grant, Margot Marsh Biodiversity Foundation (\$20,663): "Metapopulation Modeling of the Lemur Community in the Fragmented Forest of Tsinjoarivo, Eastern Central Madagascar"
2001	Research Grant, Primate Conservation, Inc. (\$2000): "Metapopulation Modeling of the Lemur Community in the Fragmented Forest of Tsinjoarivo, Eastern Central Madagascar"
2000	Research Grant, Margot Marsh Biodiversity Foundation (\$4000): "Survey of the Lemur Community of Kalambatritra Special Reserve, South Central Madagascar"
2000	Research Grant, Primate Conservation, Inc. (\$2000): "Survey of the Lemur Community of Kalambatritra Special Reserve, South Central Madagascar"
1999	Research Grant, Margot Marsh Biodiversity Foundation (\$3000): "A Survey of Lemur Communities in Corridor Forests Between Ranomafana National Park and the Mangoro River, Madagascar"
1999	Research Grant, Primate Conservation, Inc. (\$2600): "A Survey of Lemur Communities in Corridor Forests Between Ranomafana National Park and the Mangoro River, Madagascar"
1998-2006 1998-2001	Full Tuition Scholarship, IDPAS, Stony Brook University Graduate School Fellowship, Stony Brook University

Professional Memberships

American Association of Physical Anthropologists (AAPA), American Society of Primatologists (ASP), International Primatological Society (IPS), International Primate Protection League (IPPL)

University Service

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2014 – present: Department Representative, Faculty Senate
2016 – present: Member, Exam Committee (Anthropology Dept.)
2016 – present: Member, Personnel Committee (Anthropology Dept.)
2014 – 2016: Member, Executive & Curriculum Committee (Anthropology Dept.)
2014 – present: Member, Natural Areas Committee, Institute for the Environment, Sustainability and Energy
2014 – 2016: Faculty Advisor, Green Paws (Student Club)
2013: Faculty Presenter, Discover NIU Day (for high school seniors)
2012 – present: Anthropology Dept. Chemical Hygiene Officer
2012 – 2014: Faculty Advisor, NIU Anthropology Club
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Professional Service

2016: Lecturer, International Primatological Society Pre-Congress Training Program in Primate

Conservation

2007 - 2010: Member, Conservation Committee, International Primatological Society

2012 - present: Member, IUCN-SSC Primate Specialist Group

2006 - 2010: Member, Education Committee, American Society of Primatologists

2004 - 2005: President, **Behavioral Ecology Group**, discussion group at Stony Brook University

Papers and Grants Refereed

Journals (102): African Journal of Ecology (3), American Journal of Physical Anthropology (8), American Journal of Primatology (20), Animal Behaviour (1), Behavioral Ecology & Sociobiology (2), Behaviour (2), Biological Conservation (1), Biotropica (4), Chemoecology (3), Conservation Biology (2), Ecography (1), Endangered Species Research (3), Evolutionary Anthropology (1), Folia Primatologica (1), Global Ecology and Conservation (1), International Journal for Parasitology: Parasites and Wildlife (1), International Journal of Primatology (17), Journal of Wildlife Diseases (1), Journal of Natural History (1), Journal of Zoology (London) (2), Lemur News (5), Madagascar Conservation & Development (4), Malagasy Nature (1), Mammal Review (3), Oecologia (3), Oryx (4), Primate Conservation (1), Primates (6)

Chapters in Edited Volumes: 1

Granting agencies (72): National Science Foundation, USA (2), National Geographic Society (14), L.S.B. Leakey Foundation (2), International Primatological Society (10), Primate Conservation Inc. (44)

Professional References

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