

## CYNTHIA L. THOMPSON

---

220 Padnos Hall of Science  
Grand Valley State University  
Allendale, MI 49401  
thompscy@gvsu.edu

### Appointments

---

Grand Valley State University, Department of Biomedical Sciences  
*Associate Professor, 2018-Present*  
*Assistant Professor, 2013-2018*

Northeast Ohio Medical University, Department of Anatomy & Neurobiology  
*Postdoctoral Fellow, 2011-2013*

Kent State University, Department of Anthropology  
*Graduate Teaching Fellow, 2006-2011*

Kent State University, Department of Anthropology  
*Graduate Teaching Assistant, 2004-2005*

### Education

---

Kent State University  
*Ph.D. Biomedical Sciences, 2011*  
*M.A. Anthropology, 2006*

University of California, Davis  
*B.S. Evolutionary Anthropology, 2004*

### Peer-Reviewed Journal Articles

---

*Underline* indicates student author

- 2021 **Thompson, C.L.**, Alberti, M., Barve, S., Battistuzzi, F.U., Drake, J.L.,  
Goncalves, G.C., Govaert, L., Partridge, C. & Yang, Y. Back to the future:  
reintegrating biology to understand how past eco-evolutionary change can predict  
future outcomes. *Integrative and Comparative Biology*. 61(6): 2218-2232.
- 2020 **Thompson, C.L.**, Bottenberg, K.N., Lantz, A.W., Oliveira, M.A.B., Melo, L.C.O.  
& Vinyard, C.J. What smells? Developing in-field methods to characterize the  
chemical composition of wild mammalian scent cues. *Ecology & Evolution*.  
10(11): 4691-4701.
- Thompson C.L.**, Hrit R., Melo L.C.O., Vinyard C.J., Bottenberg K.N. & Oliveira  
M.A.B. Callitrichid responses to dead and dying infants: the effects of paternal  
bonding and cause of death. *Primates*. 61: 707-716.
- Thompson, C.L.**, Gapp, L.M., Melo, L.C.O., Vinyard, C.J., Oliveira,  
M.A.B. Nocturnal foragers exploit tree exudates from holes gouged by diurnal

common marmoset monkeys (*Callithrix jacchus*). *Integrative Zoology*. 15(6): 617-623.

**Thompson, C.L.**, Williams, S.H., Glander, K. Teaford, M. & Vinyard, C.J. Getting humans off monkeys' backs: using primate acclimation as a guide for habitat management efforts. *Integrative and Comparative Biology*. 60(2): 413-424.

2019 **Thompson, C.L.** & Vinyard, C.J. Monkey business: collaborating to grow an ecological physiology of primates. *American Journal of Primatology*. 81(5): e22934.

2018 **Thompson, C.L.**, Blanck, L., Pearson, M., Scheidel, C. & Vinyard, C.J. Do common marmosets use scent to communicate information about food resource quality? *Folia Primatologica*. 89(5): 305-315

2017 **Thompson, C.L.**, Powell, B.L., Williams, S.H., Hanya, G., Glander, K.E. & Vinyard, C.J. Thyroid hormone fluctuations indicate a thermoregulatory function in both a tropical (*Alouatta palliata*) and seasonally cold-habitat (*Macaca fuscata*) primate. *American Journal of Primatology*. 79(11): e22714.

**Thompson, C.L.**, Scheidel, C., Williams, S.H., Glander, K.E. & Vinyard, C.J. An assessment of skin temperature gradients in a tropical primate using infrared thermography and subcutaneous implants. *Journal of Thermal Biology*. 63: 49-57.

2016 **Thompson, C.L.**, Williams, S.H., Glander, K. Teaford, M. & Vinyard, C.J. Measuring microhabitat temperature in arboreal primates: a comparison of on-animal and stationary approaches. *International Journal of Primatology*. 37(4): 495-517.

Vinyard, C.J., **Thompson, C.L.**, Doherty, A. & Robl, N. Preference and consequences: does food preference impact oral processing in non-human primates? *Journal of Human Evolution*. 98: 27-35.

Barnett, A.A., Boyle, S.A. & **Thompson, C.L.** Pitheciid research comes of age: past puzzles, current progress, and future priorities. *American Journal of Primatology*. 78(5): 485-486.

**Thompson, C.L.** To pair or not to pair: sources of social variability with white-faced saki monkeys (*Pithecia pithecia*) as a case study. *American Journal of Primatology*. 78(5): 561-572.

Boyle, S.A., **Thompson, C.L.**, DeLuycker, A., Alvarez, S., Alvim, T.H.G., Aquino, R., Bezerra, B.N., Boubli, J.P., Bowler, M., Caselli, C.B., Chagas, R.R.D., Ferrari, S.F., Gregory, T., Haugaasen, T., Heiduck, S., Hores, R., Lehman, S., de Melo, F., Moreira, L.S., Moura, V.S., Reis, M.N.B., Norconk,

M.A., Palacios, E., Palminteri, A., Peres, C.A., Pinto, L., Port-Carvalho, M., Rodríguez, A., dos Santos, R.R., Setz, E.Z.F., Shaffer, C., Silva, F.E., Soares, R., Souza-Alves, J.P., Trevelin, L.C., Veiga, L.M., Vieira, T.M., DuBose, M.E., & Barnett, A.A. Geographic comparison of plant genera used in frugivory among the pitheciids *Cacajao*, *Callicebus*, *Chiropotes*, and *Pithecia*. *American Journal of Primatology*. 78(5): 493-506.

2014

**Thompson, C.L.**, Valença-Montenegro, M.M., Melo, L.C., Maranhão Valle, Y.B., Oliveira, M.A., Lucas, P.W. & Vinyard, C.J. Accessing foods can exert multiple distinct, and potentially competing, selective pressures on feeding in common marmoset monkeys. *Journal of Zoology*. 294(3): 161-169.

**Thompson, C.L.**, Williams, S.H., Glander, K., Teaford, M. & Vinyard, C.J. Body temperature and thermal environment in a generalized arboreal anthropoid, the mantled howling monkey (*Alouatta palliata*). *American Journal of Physical Anthropology*. 154: 1-10.

2013

**Thompson, C.L.** Non-monogamous copulations and potential within-group mating competition in white-faced saki monkeys (*Pithecia pithecia*). *American Journal of Primatology*. 75(8): 817-824.

**Thompson, C.L.**, Robl, N.J., Melo, L.C., Valença-Montenegro, M.M., Maranhão Valle, Y.B., Oliveira, M.A. & Vinyard, C.J. Spatial distribution and exploitation of gouged trees by common marmosets (*Callithrix jacchus*). *International Journal of Primatology*. 34(1): 65-85.

2012

**Thompson, C.L.**, Norconk, M.A. & Whitten, P.L. Why fight? Selective forces favoring between-group aggression in a variably pair-living primate, the white-faced saki (*Pithecia pithecia*). *Behaviour*. 149: 795-820.

Vinyard, C.J., Glander, K.E., Teaford, M.F., **Thompson, C.L.**, Deffenbaugh, M. & Williams, S.H. Methods for developing an ecological physiology of feeding in free-ranging howling monkeys (*Alouatta palliata*) at La Pacifica, Costa Rica. *International Journal of Primatology*. 33(3): 611-631.

Barnett, A.A., Boyle, S.A., Norconk, M.N., Alvim, T.H.G., Bowler, M., Chism, J., Di Fiore, A., Fernandez-Duque, E., Guimarães, A.C.P., Harrison-Levine, A., Haugaasen, T., Lehman, S., MacKinnon, K.C., de Melo, F.R., Moreira, L.S., Moura, V.S., Palminteri, S., Pinto, L.P., Port-Carvalho, M., Santos, R.R., Setz, E.Z.F., Shaffer, C., Silva, L.R., Silva, S.S.B., **Thompson, C.L.**, Veiga, L.M., Vieira, T.M., Walker-Pacheco, S.E., Spironello, W.R., MacLarnon, A. & Ferrari, S.F. Terrestrial activity in Pitheciins (*Cacajao*, *Chiropotes* and *Pithecia*). *American Journal of Primatology*. 74: 1106-1127.

- 2011 **Thompson, C.L.**, Whitten, P.L. & Norconk, M.A. Can male white-faced saki monkeys (*Pithecia pithecia*) detect female reproductive state? *Behaviour*. 148: 1313-1331.
- Thompson, C.L.** & Norconk, M.A. Within-group social bonds in white-faced saki monkeys (*Pithecia pithecia*) display male–female pair preference. *American Journal of Primatology*. 73(10): 1051-1061.
- Thompson, C.L.** Intraspecific killing of a male ocelot. *Mammalian Biology*. 76: 377-379.
- Thompson, C.L.**, Jackson, E.M., Stimpson, C.D., Horne, W.I. & Vinyard, C.J. The influence of experimental manipulations on chewing speed during *in vivo* laboratory research in tufted capuchins (*Cebus apella*). *American Journal of Physical Anthropology*. 145(3): 402-411.
- Smith, H.M. & **Thompson, C.L.** Observations of hand preference in wild groups of white-faced sakis (*Pithecia pithecia*) in Suriname. *American Journal of Primatology*. 73(7): 655-664.
- 2010 Meindl, R., Roldan Amaro, R., **Thompson, C.L.**, Gregory, T., Alvarez Izazaga, M. & Saucedo Arteaga, G. The effects of public infrastructure and household characteristics on inequality and infant mortality in Mexico: what has changed between 1990 and 2005? *Social Medicine*. 5(2): 90-99.
- Roldán Amaro, J.A., Saucedo Arteaga, G., Álvarez Izazaga, M., Meindl, R., **Thompson, C.L.** & Gregory, T. Geografía social de zonas críticas en México, su context economic politico: 1982-2005. *Estudios de Anthopología Biológica*. 14(2): 503-522.
- 2008 Williams, S.H., Vinyard, C.J., Glander, K.E., Deffenbaugh, M., Teaford, M.F. & **Thompson, C.L.** Telemetry system for assessing jaw-muscle function in free-ranging primates. *International Journal of Primatology*. 29(6):1441-1453.

### **Book Chapters & News Pieces**

---

- 2013 **Thompson, C.L.** & Chadwell, B.A. Primate highlights in integrative & comparative biology. *Evolutionary Anthropology: Issues, News, and Reviews*. 22: 41-42.
- Thompson, C.L.** & Norconk, M.A. Testing models of social behavior with regard to inter- and intra-group interactions in free-ranging white-faced saki monkeys (*Pithecia pithecia pithecia*). In L.M. Veiga, A.A. Barnett, S.F. Ferrari, & Norconk, M.A. (Eds.), *Evolutionary Biology and Conservation of Titis, Sakis and Uacaris*. Cambridge: Cambridge University Press.

## Presentations & Abstracts

---

- 2023 **Thompson, C.L., Bottenberg, K.N., Lantz, A.W., Oliveira, M.A.B** Vinyard, C.J. Characterizing scent composition in the field: using portable GC-MS to study the chemical ecology of wild common marmoset monkeys (*Callithrix jacchus*). *Joint Meeting of the International Primatological Society and the Latin American Society of Primatology*, Quito, Ecuador
- Thompson, C.L., Williams, S.H., Glander, K. Teaford, M. & Vinyard, C.J.** Mantled howler monkeys (*Alouatta palliata*) show morphological, physiological, and behavioral plasticity in thermoregulatory traits. *Joint Meeting of the International Primatological Society and the Latin American Society of Primatology*, Quito, Ecuador.
- 2020 **Thompson, C.L., Williams, S.H., Glander, K.E., Teaford, M.F. & Vinyard, C.J.** Getting humans off monkeys' backs: can ecophysiological research inform primate conservation and habitat management efforts? *Society for Integrative and Comparative Biology*, Austin, TX.
- 2019 **Thompson, C.L., Bottenberg, K.N., Lantz, A.W., Vinyard, C.J., Melo, L.C.O. & Oliveira, M.A.B.** Does scent mark composition demonstrate a relationship with feeding behavior in wild common marmoset monkeys (*Callithrix jacchus*) in Pernambuco, Brazil? *Annual Conference of the American Society of Primatologists*, Madison, WI.
- Gapp, L.M., Vinyard, C.J., Melo, L.C.O., Oliveira, M.A.B. & Thompson, C.L.** The effect of nocturnal competitors on common marmoset monkey (*Callithrix jacchus*) exudate feeding behavior. *Midwest Primate Interest Group*, DeKalb, IL.
- 2018 **Thompson, C.L., Hrit, R.T., Vinyard, C.J., Bottenberg, K.N. & Oliveira, M.A.B.** Behavioral response of a wild common marmoset (*Callithrix jacchus*) group toward an infant's death at Tapacurá Field Station, Pernambuco, Brazil. *27<sup>th</sup> Congress of the International Primatological Society*, Nairobi, Kenya.
- Bottenberg, K.N., Lantz, A.W., Vinyard, C.J., Oliveira, M.A.B. & Thompson, C.L.** Controlling for contamination of in-field scent mark analysis of common marmoset monkeys (*Callithrix jacchus*) at Tapacurá Field Station, Pernambuco, Brazil. *27<sup>th</sup> Congress of the International Primatological Society*, Nairobi, Kenya.
- Atsalis, S., Landburg, C., Vreedzam, A., **Thompson, C. L.** & Norconk, M. Exceptional training of tomorrow's conservation leaders in Suriname. *27<sup>th</sup> Congress of the International Primatological Society*, Nairobi, Kenya.
- Bottenberg, K.N., Lantz, A.W., Vinyard, C.J., Oliveira, M.A.B. & Thompson, C.L.** Controlling for contamination of in-field scent mark analysis of common

marmoset monkeys (*Callithrix jacchus*) at Tapacurá Field Station, Pernambuco, Brazil. *Midwest Primate Interest Group*, Bloomington, IN.

2017

Bottenberg, K.N. & **Thompson, C.L.** Testicular thermoregulatory behavior in mantled howler monkeys (*Alouatta palliata*). *Midwest Primate Interest Group*, Evanston, IL.

2016

**Thompson, C.L.**, Williams, S. Glander, K.E. & Vinyard, C.J. Cold-induced thermoregulation through thyroid hormones in a large-bodied, tropical primate, mantled howling monkeys (*Alouatta palliata*). *Joint meeting of the International Primatological Society and the American Society of Primatologists*, Chicago, IL.

**Thompson, C.L.**, Scheidel, C., Williams, S.H., Glander, K.E. & Vinyard, C.J. The use of infrared thermal imaging in temperature measurement and behavioral assessment: effects of thermal windows. *Measuring Behavior*, Dublin, Ireland.

2015

**Thompson, C.L.**, Scheidel, C., Pearson, M. & Vinyard, C.J. Do marmosets use olfactory cues to identify high quality food resources? *Midwest Primate Interest Group*, St. Louis, MO.

Powell, B., Vinyard, C.J., Brittain, R. & **Thompson, C.L.** Behavioral thermoregulation in Japanese macaques (*Macaca fuscata*) during winter. *Midwest Primate Interest Group*, St. Louis, MO.

**Thompson, C.L.**, Scheidel, C., Pearson, M. & Vinyard, C.J. Do marmosets use olfactory cues to identify high quality food resources? *American Journal of Physical Anthropology*. S60: 304.

Vinyard, C.J., **Thompson, C.L.**, Doherty, A. & Robl, N. Does food preference impact oral processing in non-human primates? *American Journal of Physical Anthropology*. S60: 314.

2014

**Thompson, C.L.** To pair or not to pair: sources of social variability in white-faced saki monkeys (*Pithecia pithecia*). *Midwest Primate Interest Group*, Madison, WI.

Scheidel, C., Pearson, M., Vinyard, C.J. & **Thompson, C.L.** Do marmosets use scent to choose gouge holes? A preliminary test in captive common marmosets (*Callithrix jacchus*). *Midwest Primate Interest Group*. Madison, WI.

**Thompson, C.L.**, Valença-Montenegro, M.M., N.J., Melo, L.C., Maranhão Valle, Y.B., Oliveira, M.A., Lucas, P.W. & Vinyard, C.J. Cracking the challenges of extractive foraging: common marmosets use behavior to augment morphological specializations. *25th Congress of the International Primatological Society*, Hanoi, Vietnam.

Vinyard, C.J. & **Thompson, C.L.** Does food preference impact oral processing in non-human primates? *3rd International Conference on Food Oral Processing*, Wageningen, The Netherlands.

2013

**Thompson, C.L.**, Valença-Montenegro, M.M., N.J., Melo, L.C., Maranhão Valle, Y.B., de Oliveira, M.A., Lucas, P.W. & Vinyard, C.J. Common marmosets (*Callithrix jacchus*) more intensely exploit trees with the less mechanical resistance to fracture. *II Congresso Latino-Americano e XV Congresso Brasileiro de Primatologia*, Recife, Brazil.

**Thompson, C.L.**, Valença-Montenegro, M.M., N.J., Melo, L.C., Maranhão Valle, Y.B., de Oliveira, M.A., Lucas, P.W. & Vinyard, C.J. Cracking the mechanical challenges of extractive foraging: common marmosets use behavior to augment morphological specializations. *Midwest Primate Interest Group*, Ames, IA.

**Thompson, C.L.**, Williams, S.H., Glander, K., Teaford, M. & Vinyard, C.J. Too hot, too cold, or just right: thermal challenges facing mantled howling monkeys (*Alouatta palliata*) in a dry tropical forest. *American Association of Physical Anthropology*, Knoxville, TN.

**Thompson, C.L.**, Williams, S.H., Glander, K., Teaford, M. & Vinyard, C.J. Too hot, too cold, or just right: thermal challenges facing mantled howling monkeys (*Alouatta palliata*) in a dry tropical forest. *The Society for Integrative & Comparative Biology*, San Francisco, CA.

Vinyard, C.J., **Thompson, C.L.**, Luck, P.J. & Foegeding, E.A. Tough and then some: new directions for a growing Food Science in primatology. *American Association of Physical Anthropology*, Knoxville, TN.

2012

**Thompson, C.L.**, Robl, N.J., Melo, L.C., Valença-Montenegro, M.M., Maranhão Valle, Y.B., Oliveira, M.A. & Vinyard, C.J. Spatial distribution of common marmoset (*Callithrix jacchus*) gouge trees at Tapacurá Field Station, Brazil. *American Journal of Primatology*. 74(S1): 45.

**Thompson, C.L.**, Whitten, P.L. & Norconk, M.A. Can male white-faced saki monkeys (*Pithecia pithecia*) detect female reproductive state? *American Journal of Physical Anthropology*. 147(S54): 285.

2011

**Thompson, C.L.**, Glander, K.E., Williams, S.H., Suarez, F., Teaford, M.F. & Vinyard, C.J. A preliminary look at the relationships among temperature, feeding behavior and social rank in mantled howling monkeys (*Alouatta palliata*) at Hacienda La Pacifica, Costa Rica. *Midwest Primate Interest Group*, Kent, OH.

**Thompson, C.L.**, Norconk, M.A. & Whitten, P.L. Selective forces driving intergroup aggression in white-faced saki monkeys (*Pithecia pithecia*). *48<sup>th</sup> Annual Meeting of the Animal Behavior Society*, Bloomington, IN.

- Thompson, C.L.** & Norconk, M.A. Social bonds in wild white-faced saki monkeys reflect male/female pair preference, despite lacking behavior and physical traits typical of primate monogamy. *American Journal of Physical Anthropology*. 144(S52): 293.
- 2010 **Thompson, C.L.** Monogamous and non-monogamous mating behavior in white-faced saki monkeys (*Pithecia pithecia*). *American Journal of Physical Anthropology*. 141(S50): 229.
- Thompson, C.L.** & Norconk, M.A. Social bonds between adult white-faced sakis (*Pithecia pithecia*) are strongest between male/female pairs, despite absence of monogamy and pair-bonding behaviors. *Midwest Primate Interest Group*, Chicago, IL.
- Thompson, C.L.**, Norconk, M.A., Anzelc, A., Gregory, L. T., Hurst, D. & Robl, N. Group dynamics of free-ranging white-faced sakis (*Pithecia pithecia*) at Brownsberg Naturepark, Suriname. *American Journal of Primatology*. 72(S1): 59.
- Norconk, M.N., Poling, S. & **Thompson, C.L.** Sight vs. sound: visual stimuli elicit stronger behavioral responses than vocalizations from wild white-faced sakis in Suriname. *American Journal of Physical Anthropology*. 141(S50): 178.
- 2008 Gregory, L.T., **Thompson, C.L.** & Norconk, M.N. The role of “rare” primates in primate communities: the case of bearded and white-faced sakis at Brownsberg Naturepark in Suriname. *Association for Tropical Biology and Conservation*, Paramaribo, Suriname.
- 2007 **Thompson, C.L.**, Jackson, E.M., Stimpson, C.D. & Vinyard, C.J. Assessing how experimental and surgical manipulations during *in vivo* laboratory research influence chewing speed in tufted capuchins (*Cebus apella*). *American Journal of Physical Anthropology*. 132(S44): 231.
- Vinyard, C.J., **Thompson, C.L.**, Stimpson, C.D., Mork, A.L., Armfield, B.A., Doherty, A.H., Wasserman, H.M., Jackson, E.M. & Horne, W.I. Masseter muscle strain during chewing in tufted capuchins (*Cebus apella*). *American Journal of Physical Anthropology*. 132(S44): 239.
- Amaro, J.A.R., Álvarez, M., Meindl, R.S., **Thompson, C.L.** & Gregory, L.T. Social geography of critical zones in Mexico by regions. *XIV Coloquio Internacional de Antropología Física “Juan Comas,”* San Cristóbal de las Casas, Chiapas, México.
- Williams, S.H., Vinyard, C.J., Glander, K.E., Deffenbaugh, M., Teaford, M.F. & **Thompson, C.L.** EMG telemetry in free-ranging primates: pilot data from howling monkeys (*Alouatta palliata*) at La Pacifica, Costa Rica. *American Journal of Primatology*. 69(S1): 21.



Williams, S.H., Vinyard, C.J., Glander, K.E., Deffenbaugh, M., Teaford, M.F. & **Thompson, C.L.** A preliminary report on a new system for recording jaw-muscle electromyograms from free-ranging primates. *Eighth International Congress of Vertebrate Morphology*, Paris, France.

- 2006 **Thompson, C.L.** & Norconk, M.A. Sex-biased inter- and intra-group social behavior in wild white-faced sakis (*Pithecia pithecia*), Brownsberg Naturepark, Suriname. *American Journal of Primatology*. 68(S1): 82.
- 2005 Norconk, M.A., Colavita, A., De Dijn, B.P.E., Gleason, T.M., Gregory, L.T., Lopez, R., MacKinnon, K.C., Malukiewicz, J., Mikels, J.D., **Thompson, C.L.** & Vreedzaam, A. Community-wide feeding strategies in a Guianan forest: results of the 2004 & 2005 field seasons at Brownsberg Naturepark, Suriname. *Midwest Primate Interest Group*, St. Louis, MO.

### **Extramural Grants**

---

- 2022-2023 Margot Marsh Biodiversity Foundation (PI; \$20,000) *The Guianas primate project: primate surveys paired with community interviews in Guyana and Suriname to focus on species and habitat conservation of Ateles paniscus and Chiropotes sagulatus.*
- 2022-2023 United Nations Development Fund, Small Grants Program (co-PI; \$3,910) *Suriname primate project planning grant.*
- 2020-2021 The Company of Biologists, Scientific Meeting Grant (PI; \$5,163) *Primate thermoregulation in a world of rising temperatures: a symposium at the 2020 International Primatological Society Conference.*
- 2017-2019 Beckman Scholar Program at GVSU, Arnold and Mabel Beckman Foundation (Supporting Role-Faculty Mentor; \$130,000).
- 2016-2018 National Science Foundation, High-risk Research in Biological Anthropology (PI; \$26,498) *Breaking the smell barrier: development of in-field methods for analysis of primate olfactory compounds.*
- 2015-2016 Conservation International, Primate Action Fund (co-PI; \$3,000) *Third annual primate field ecology and conservation workshop for Suriname University students at Brownsberg Nature Park, Suriname.*
- 2014-2016 National Geographic Society, Conservation Trust (PI; \$20,286) *Evaluating the sustainability of land use in Suriname over the last decade: the impact on primate populations.*
- 2013-2014 American Society of Primatologists, Small Research Grant (PI; \$1,500) *Non-invasive methods to evaluate thermoregulatory and metabolic hormones in free-ranging New World primates.*

- 2013-2014 Conservation International, Primate Action Fund (PI; \$5,000) *Climate change and thermoregulation: development of analysis techniques in New World primates.*  
International Primatological Society, Lawrence Jacobsen Education Development Grant (co-PI; \$1,500) *Primate field ecology and conservation workshop for Suriname University students at Brownsberg Nature Park, Suriname.*
- 2013 Conservation International, Primate Action Fund (co-PI; \$5,000) *Primate field ecology and conservation workshop for Suriname University students at Brownsberg Nature Park, Suriname.*  
Golden Key International Honors Society, Alumni Professional Development Grant (PI; \$1,000).  
Primate Conservation Inc. (co-PI; \$5,000) *Primate field ecology and conservation workshop in Suriname.*
- 2012-2013 American Association of Physical Anthropologists, Professional Development Grant (PI; \$5,000) *Development of non-invasive methods for studying the hormonal regulation of feeding behavior in wild primates.*
- 2009-2010 National Science Foundation, Doctoral Dissertation Improvement Grant (PI; \$14,728) *Why fight? Examining the ultimate causes of aggressive intertroop encounters in wild white-faced saki monkeys (*Pithecia pithecia*).*
- 2008 International Primatological Society, Research Grant (PI; \$1,500) *Why fight? Addressing the ultimate causes of aggressive intertroop encounters in white-faced saki monkeys (*Pithecia pithecia*).*

### **Intramural Grants & Awards**

---

- 2023 GVSU Office of Undergraduate Research, P. Douglas Kindschi Undergraduate Research Fellowship in the Sciences (PI; \$3,000) *Development of non-invasive techniques to measure the mammalian heat-shock response.*
- 2020 GVSU Office of Undergraduate Research, Fall Undergraduate Research Assistant – STEM (PI; \$2,820) *Too hot to handle? A review of primate behavioral thermoregulation.*  
GVSU Office of Undergraduate Research, Remote Summer Undergraduate Research Assistant (PI; \$2,820) *Too hot to handle? A review of primate behavioral thermoregulation.*
- 2019 GVSU Office of Undergraduate Research, Student Summer Scholar Program (PI; \$6,000) *What lurks in the dark: do common marmoset monkeys face feeding competition from nocturnal foragers?*
- 2018 GVSU Graduate School, Presidential Research Grant (Faculty Mentor: \$1,500) *Seasonal variation in energetic pathways impacting thermoregulation in*

*Japanese macaques (Macaca fuscata) and tropical mantled howler monkeys (Alouatta palliata).*

- 2017 GVSU Office of Undergraduate Research, Beckman Scholar Program Student Award (Faculty Mentor; \$26,000)
- 2016 GVSU's Distinguished Early Career Scholar Award
- 2015 GVSU Office of Undergraduate Research, Student Summer Scholar Program (PI; \$6,000) *Behavioral and physiological thermoregulation in Japanese macaque monkeys.*
- 2014 GVSU Center for Scholarly and Creative Excellence, Interdisciplinary Research Initiative (PI; \$4,184) *Developing a holistic model of cold-stressed primate thermoregulation from Japanese macaques (Macaca fuscata).*
- GVSU's Office of Undergraduate Research, Engaging Undergraduate Students in Scholarship: Supplementary Startup Funds for New Faculty (PI; \$994).
- Kyoto University Cooperative Research Program (PI; two awards, \$2,600 total) *Developing a model of cold- and heat-stressed primate thermoregulation from Japanese macaques (Macaca fuscata).*

### **Student Research Mentorship**

---

Graduate Mentorship (6 total):

*Melissa Mattson*, M.H.S. Biomedical Sciences, In-progress, GVSU (Advisor)

Thesis: The influence of thermal variables on heat stress in non-human primates

*Francesca Golus*, M.S. Biology, 2021, GVSU (Committee Member)

Thesis: Molecular lifeboats to Ararat: microsatellite analysis of chimpanzee populations in zoos

*Lillianne Nelson*, M.H.S. Biomedical Sciences, 2020, GVSU (Advisor)

Thesis: Hormonal responses to seasonal thermal and ecological stressors in Japanese macaques (*Macaca fuscata*)

*Hannah Vermeer*, M.H.S. Biomedical Sciences, 2019, GVSU (Committee Member)

Thesis: The association between dietary niche variation in rodents and climate change across the Paleocene-Eocene thermal maximum

*Justin Tran*, M.H.S. Biomedical Sciences, 2016, GVSU (Committee Member)

Thesis: Categorization of food value via crayfish aggression

*Sylvain Perez*, D.V.M., 2015, Institut National Polytechnique de Toulouse, France (Supervisor)

Internship Project: Behavioral data collection in Japanese macaques (*Macaca fuscata*)

Undergraduate Research Mentorship (43 total; listed in reverse chronological order):

*Sawyer Barton, Makayla Madsen, Maya Topoleski, Ashley Brown, Erin Brady, Emily Hermann, Breyanna Rivera, Lauren Gapp, Mary Price, Kim Bottenberg, Devinder Kaur, Rebecca Hrit, Hao Yu Guo, Lauren Blanck, Kismet Gray, Alex Green, Charlotte Van Noort, Brianna Powell, Patricia Drake, Caleb Scheidel, Naomi Reussien, Meghan Pearson, Helen Smith, Guno*

Marjanom, Ryan Stiles, Samantha Klutcho, Olivia Cooley, Christi Boze, Amanda Hennells, Andrea Norman, Austin Mazur, Dan Wenzel, Roberto Cannizzo, Skylar Thompson, Jessica Vogt, Paula Coutinho, Chris Gordon, Rose Hores, Reshma Jankipersad, Tatiana Dolgushina, Michelle Ghandhi, Scott Detloff, Freya Koch

### Invited Lectures & Presentations

---

- 2022 *Mantled howler monkeys (Alouatta palliata) show morphological, physiological, and behavioral plasticity in thermoregulatory traits.* Joint Meeting of the International Primatological Society and the Latin American Society of Primatology. Symposium: Primate thermoregulation in a world of rising temperatures, Quito, Ecuador.
- Characterizing scent composition in the field: using portable GC-MS to study the chemical ecology of wild common marmoset monkeys (Callithrix jacchus).* Joint Meeting of the International Primatological Society and the Latin American Society of Primatology. Invited Symposium: Getting the data you need: non-invasive field techniques for primate research and conservation, Quito, Ecuador.
- Climate change and the Neotropics: can monkeys cope with rising temperatures?* Guest Seminar, Biology Department, Anton de Kom University, Paramaribo, Suriname.
- 2021 Guest Seminar, Wayne State University, Master's Program in Ecology & Environmental Sciences, ESG 6165: Biodiversity Changes in the Anthropocene.
- 2020 *Getting humans off monkeys' backs: can ecophysiological research inform primate conservation and habitat management efforts?* Society for Integrative and Comparative Biology Invited Symposium, Applied functional biology: linking ecological morphology to conservation and management, Austin, TX
- 2018 *Linking field and lab techniques to study marmoset feeding behavior,* Grand Valley State University, Biomedical Sciences Seminar Series
- 2017 *Linking field and lab techniques to study marmoset ecology,* Universidade Federal Rural de Pernambuco, Seminar for Graduate Program in Tropical Animal Science
- Integrating behavior, physiology & ecology of wild primates,* Grand Valley State University, Guest Lecture, Graduate Seminar in Biomedical Sciences (BMS 501)
- 2016 *4<sup>th</sup> Annual Primate Ecology & Conservation Workshop: Building Conservation Leadership Skills,* Paramaribo, Suriname
- Monkey sex: who's doing who and why?* Science on Tap, Grand Rapids
- Master's research in primate olfaction,* Grand Valley State University, Guest Lecture, Graduate Seminar in Biomedical Sciences
- 2015 *The intersection of behavior, physiology, and anatomy in wild primates,* Siena Heights University, Seminar Lecture
- 2014 *2<sup>nd</sup> Annual Primate Ecology & Conservation Workshop,* Brownsberg Nature Park, Suriname

- 2013 *Too hot, too cold, or just right: thermal challenges facing mantled howling monkeys (Alouatta palliata) in a dry tropical forest*, Grand Valley State University, College of Liberal Arts and Sciences Research Colloquia  
*Environment, physiology, and behavior: a holistic approach to New World primate biology*, Ohio University, Ecolunch Seminar  
*The heart & cardiac cycle*, West Virginia School of Osteopathic Medicine
- 2011 *Sex, aggression, & affiliation: the social system of white-faced saki monkeys (Pithecia pithecia)*, Kent State University, Biomedical Sciences Seminar

### Professional Service

---

- 2023 Symposium Organizer, “Primate thermoregulation in a world of rising temperatures.” *Joint Meeting of the International Primatological Society and the Latin American Society of Primatology*, Quito, Ecuador
- 2021-present Editorial Board Member, *American Journal of Biological Anthropology*
- 2019-present Member, *American Society of Primatologists*, Conservation Committee
- 2018-present Editorial Board Member, *American Society of Primatologists*
- 2020 Judge for Student Competition, Division of Animal Behavior, *Society for Integrative and Comparative Biology Annual Meeting*, Austin, TX
- 2019 Session Chair, 42<sup>nd</sup> Meeting of the *American Society of Primatologists*, Madison, WI
- 2014-2016 Member, *American Society of Primatologists*, Program Committee
- 2016 Co-Host, Annual Meeting of the *Midwest Primate Interest Group*, Allendale, MI
- 2013-2016 Co-Editor for Special Issue: “Progressing Pitheciines-recent advances in the study of *Callicebus*, *Pithecia*, *Chiropotes* and *Cacajao*,” *American Journal of Primatology*
- 2013 Judge for Student Competition, Division of Animal Behavior, *Society for Integrative and Comparative Biology Annual Meeting*, San Francisco, CA
- 2012 Session Chair, 35th Meeting of the *American Society of Primatologists*, Sacramento, CA

### Manuscripts Reviewed (53 total):

American Journal of Primatology (22), American Journal of Biological Anthropology (4), Physiology & Behavior (4), International Journal of Primatology (3), Folia Primatologica (2), Journal of Thermal Biology (2), Royal Society Open Science (2), Animal Behavior (1), Animal Production Science (1), Behavioral Ecology (1), Behavioural Processes (1), Biological Journal of the Linnean Society (1), Biology Letters (1), Evolutionary Anthropology (1), Information Processing in Agriculture (1), PeerJ (1), PLOS One (1), Primates (1), Scientific Reports (1), Zoo Biology (1), Book Chapters (1)

Grants Reviewed (25 total):

American Society of Primatologists Conservation Grant (16), American Association of Physical Anthropology Professional Development Grant (4), National Science Foundation (3), Leakey Foundation (1), Graduate Women in Science Fellowship (1)

### **Institutional Service**

---

*2022* Inclusion Advocate, GVSU Grants & Contracts Specialist Search Committee  
*2019-present* Member, GVSU Institutional Animal Care and Use Policies and Procedures Subcommittee (IACUPPS)  
*2017-present* Chair, GVSU Biomedical Sciences Awards and Scholarships Committee  
*2016-present* Member, GVSU Institutional Animal Care and Use Committee (IACUC)  
*2021-2022* Member, GVSU Provost's Office, Digital Measures Working Group (ad hoc)  
*2020-2021* Member, GVSU Biomedical Sciences Tenure-track Faculty Search Committee  
*2017-2019* Member, GVSU Office of Undergraduate Research and Scholarship, Beckman Scholars Advisory Committee  
*2016-2019* Member, GVSU Advising Office, Pre-professional Committee  
*2015-2017* Member, GVSU Biomedical Sciences Graduate Programs Committee  
*2016-2017* Chair, GVSU Anatomy & Physiology Tenure-track Faculty Search Committee  
*2015-2016* Member, GVSU Microbiology Tenure-track Faculty Search  
*2015* Member, GVSU University Academic Senate  
*2014-2015* Member, GVSU Biomedical Sciences Seminars Committee  
*2013-2014* Member, GVSU Biomedical Sciences Laboratory Supervisor Search Committee