

MARY ANN RAGHANTI

CURRICULUM VITA

DEPARTMENT OF ANTHROPOLOGY
750 HILLTOP DR.
226 LOWRY HALL
KENT STATE UNIVERSITY
KENT, OHIO 44242

EMAIL: MRAGHANT@KENT.EDU
PHONE: 330-672-9354
WWW.KENT.EDU/ ANTHROPOLOGY

APPOINTMENTS

2018-present	<i>Professor, Department of Anthropology, Kent State University</i>
2017-present	<i>Chair, Department of Anthropology, Kent State University</i>
2015-2017	<i>Interim Chair, Department of Anthropology, Kent State University</i>
2014	<i>Interim Graduate Coordinator, Department of Anthropology, Kent State University</i>
2013	<i>Acting Chair, Department of Anthropology, Kent State University (July 1 – Sept. 1)</i>
2013-2018	<i>Associate Professor, Department of Anthropology, Kent State University</i>
2008-2013	<i>Assistant Professor, Department of Anthropology, Kent State University</i>
2007-present	<i>Graduate Faculty, Biological Anthropology, Kent State University</i>
2007-present	<i>Graduate Faculty, School of Biomedical Sciences, Kent State University</i>
2008-2010	<i>Comparative Physiologist, Cleveland Metroparks Zoo</i>
2007-2008	<i>Consultant, Conservation and Science, Cleveland Metroparks Zoo</i>
2007-2008	<i>Research Associate, Department of Anthropology, Kent State University</i>
2006-2007	<i>Zoological Endocrinology Laboratory Supervisor, Cleveland Metroparks Zoo</i>

EDUCATION

2007	Ph.D., Biomedical Sciences, Kent State University
2002	M.A., Anthropology, Kent State University
1996	B.A., Anthropology, University of Toledo

RESEARCH INTERESTS

- Comparative neurobiology with an evolutionary perspective
- Neuromodulation of cognition and behavior
- Hormonal correlates of behavior in non-human primates
- Neural mechanisms of social attachment

EXTERNAL RESEARCH SUPPORT**TOTAL: \$5,885,828.00**
TOTAL TO KSU: \$3,317,413.00**NSF BCS-212354**

8-15-21 – 7-31-24

National Science Foundation

\$300,000.00

Middle childhood growth and development in the evolution of human life history (P.I. Rafaela Takeshita, **co-P.I.s Mary Ann Raghanti**, Wilson Chung, Mahinda Gangoda).

NIH R01AG067419-01A1

2-15-21 – 1-31-25

National Institutes of Health

\$3,778,453.00

Alzheimer's Disease Pathology in a Primate Model

PI: William Hopkins, co-PIs: **Mary Ann Raghanti**, Melissa Edler, Chet Sherwood, Elaine Guevera

(subaward 3001715043 to KSU: \$1,210,239.36)

NIH R01ES029344 (PI: Tomas Guilarte, Florida International University) 4-1-20 – 3-31-22

National Institute of Health

\$125,721.00

Tyrosine hydroxylase and cholinergic neurodegeneration in manganese toxicity

(subaward 800008801-01UG to M. Edler/M.A. Raghanti, KSU)

NIH 3U42OD011197-19S1 (PI: William Hopkins, MD Anderson)

9-1-19 – 6-30-20

National Institute of Health

\$211,925.00

AD pathology and cognition in chimpanzees

(subaward to Mary Ann Raghanti, KSU)

NSF IRES-1853937

7-1-19 – 7-1-22

National Science Foundation

\$298,686.00

Insights into human evolution from genetic, morphological, and neuroscientific analyses at the Primate Research Institute of Kyoto University, Japan (P.I. Anthony Tosi, **co-P.I.s Mary Ann Raghanti**, Owen Lovejoy, Richard Meindl).

NSF BCS-1846201

5-15-19 – 4-30-24

National Science Foundation

\$309,999.00

Human Origins and Comparative Neurochemistry

PI: Mary Ann Raghanti

NIH R01ES029344 (PI: Tomas Guilarte Florida International University) 2-15-19 – 2-15-20

National Institute of Health

\$143,624.00

Tyrosine hydroxylase and cholinergic neurodegeneration in manganese toxicity

(subaward 800008801-01UG to M. Edler/M.A. Raghanti, KSU)

NSF BCS-1316829

8-01-13 – 7-31-17

National Science Foundation

\$225,615.00

Comparative analysis of a critical brain structure: The Basal Ganglia

PI: Mary Ann Raghanti

NSF BCS-0921079 8-15-09 – 7-31-13
National Science Foundation \$289,872.00
The role of cortical neurotransmitter systems in human and nonhuman primate brain evolution
PI: Mary Ann Raghanti

MA 06-08-0349-08 10-1-08 – 9-30-10
Institutes of Museum and Library Services \$142,666.00
Enhancing Veterinary Excellence- Cleveland Metroparks Zoo's Conservation Medicine Program
P.I. P.M. Dennis, **co-Investigator: M.A. Raghanti**

Morris Animal Foundation 2008
Metabolic disturbances associated with iron overload in the black rhinoceros \$51,000
PI: P.M. Dennis, **co-Investigators: M.A. Raghanti**, M.M. Vick, B.A. Wolfe, D.E. Wildt

Morris Animal Foundation 2007
Pilot study: Insulin resistance – a risk factor in African elephant reproductive acyclicity?
PI: P.M. Dennis, co-Investigators: **M.A. Raghanti** and J. Brown \$8,066

Sigma Xi Grants-in-Aid of Research 2001
Salivary cortisol measurements and their relationship to dominance status and tool use in capuchin monkeys (*Cebus apella*) \$400
PI: Mary Ann Raghanti

EXTERNAL RESEARCH SUPPORT AWARDED TO GRADUATE STUDENTS

Sigma Xi- Grants-in-Aid: A comparative analysis of monoamine oxidase-B expression in human, chimpanzee, and macaque brains throughout the lifespan. **Danielle Jones** (PhD candidate). Awarded, 2021.

NSF EAPSI (East Asia and Pacific Summer Institutes for U.S. Graduate Students): The role of monoamine oxidase A gene polymorphism in aggressive behavior in macaques, submitted by **Danielle Jones** (MA student). Awarded, 2017.

NSF EAPSI (East Asia and Pacific Summer Institutes for U.S. Graduate Students): Learning and memory in aged common marmosets, submitted by **Emily Munger** (MA student). Awarded, 2015.

Sigma Xi Grants-in-Aid: Are neurodegenerative disorders human-specific? A study of Alzheimer's pathology in aged chimpanzees, submitted by **Melissa Edler** (PhD candidate). Awarded, 2014.

EDITORIAL POSITIONS

2015-	Editorial Board Member, Journal of Chemical Neuroanatomy
2016-	Guest Editor, Proceedings of the National Academy of Sciences
2018-	Editorial Board Member, Journal of Comparative Neurology
2021-	Advisory Board Member, Brain Structure and Function

FEDERAL REVIEW PANELS

National Science Foundation (NSF) Neural Systems Cluster
National Institutes of Health (NIH) National Primate Research Centers

UNIVERSITY SUPPORT

2007	KSU Division of Research and Graduate Studies – Conference travel: Society for Neuroscience, San Diego, CA \$500
2008	KSU Division of Research and Graduate Studies – Proposal Incentive NSF proposal submitted January, 2008 \$500
2008	KSU Division of Research and Graduate Studies – Proposal Incentive NSF proposal submitted June, 2008 \$500
2008	KSU Division of Research and Graduate Studies – Conference travel: Society for Neuroscience, Washington D.C. \$500
2013	KSU University Research Council – Research support \$3500.00

PUBLICATIONS

PEER REVIEWED RESEARCH ARTICLES

***KSU GRADUATE STUDENT; **KSU UNDERGRADUATE STUDENT**

1. Hopkins, W.D., Xi, L., Roberts, N., Mullholland, M., Sherwood, C.C., Edler, M.K. **Raghanti, M.A.**, Schapiro, S.J. (accepted) Age-related differences in surface area and cortical thickness in chimpanzees (*Pan troglodytes*).
2. Edler, M.K., Munger, E.L., Maycon, H., Hopkins, W.D., Hof, P.R., Sherwood, C.C., **Raghanti, M.A.** (2023) The association of astrogliosis and microglial activation with aging and Alzheimer's disease pathology in the chimpanzees brain. *Journal of Neuroscience Research*. Doi: 10.1002/jnr.25167

3. Takeshita, R.S.C., Edler, M.K., Meindl, R.S., Sherwood, C.C., Hopkins, W.D., **Raghanti, M.A.** (2022) Age, adrenal steroids, and cognitive functioning in captive chimpanzees (*Pan troglodytes*). *Peer J*. doi: 10.7717/peerj.14323
4. Munger, E.L., Edler, M.K., Hopkins, W.D., Hof, P.R., Sherwood, C.C., **Raghanti, M.A.** (2022) Comparative analysis of astrocytes in the prefrontal cortex of human and nonhuman primates: Insights into the evolution of human brain energetics. *Journal of Comparative Neurology*, 530, 3106-3125.
5. Smith, H.N.*, Perrone, A.*, Wilson, M.*, **Raghanti, M.A.**, Lovejoy, C.O., Rosen, M.J., Shanbhag, S.J., DeForrest, D.S., Lyman, R.L., Eren, M.I. (2021) Rock music: An auditory assessment of knapping. *Lithic Technology*, 46, 320-335.
6. Freire-Cobo, C., Edler, M.K., Munger, E.*, Laffey, J., Raia, S., In, S.S., Varghese, M., Wicinski, B., Medalla, M., Perez, S., Mufson, E.J., Erwin, J.M., Guevara, E., Sherwood, C.C., Luebeke, J.I., Lacreuse, A., **Raghanti, M.A.**, Hof, P.R. (2021) Comparative neuropathology in aging primates: A perspective. *American Journal of Primatology*, 83, 11:e23299.
7. Jacob, J., Kent, M., Benson-Amram, S., Herculano-Houzel, S., **Raghanti, M.A.**, Ploppert, E., Drake, J., Miller, A., Hindi, B., Natale, N.R., Daniels, S., Fanelli, R., Landis, T. Gilbert, A., Johnson, S., Lai, A., Hyer, M., Rzidlio, A., Anchor, C., Gehrt, S., Lambert, K. (2021) Cytoarchitectural characteristics associated with cognitive flexibility in raccoons. *Journal of Comparative Neurology* 529, 3375-3388.
8. Hirter, K.*, Miller, E.N., Stimpson, C.D., Phillips, K.A., Hopkins, W.D., Hof, P.R., Sherwood, C.C., Lovejoy, C.O., **Raghanti, M.A.** (2021) The nucleus accumbens and ventral pallidum exhibit greater dopaminergic innervation in humans compared to other primates. *Brain Structure and Function* 226, 1909-1923.
9. Mullholland, M.M., Sherwood, C.C., Schapiro, S.J., **Raghanti, M.A.**, Hopkins, W.D. (2021) Age- and cognition-related differences in the gray matter volume of the chimpanzee brain (*Pan troglodytes*): A voxel-based morphometry and conjunction analysis. *American Journal of Primatology* doi: 10.1002/ajp.23264.
10. Jones, D.N.*, **Raghanti, M.A.** (2021) The role of monoamine oxidases in the pathophysiology of neuropsychiatric, neurodevelopmental, and neurodegenerative diseases. *Journal of Chemical Neuroanatomy* 114, 101957
11. Hopkins, W.D., Marenco, M.C., Neal, S.J., Schapiro, S.J., **Raghanti, M.A.**, Sherwood, C.C. (2021) Age-related changes in chimpanzee (*Pan troglodytes*) cognition: Cross-sectional and longitudinal analyses. *American Journal of Primatology* doi: 10.1002/ajp.23214.
12. Jones, D.N.*, Erwin, J.M., Hof, P.R., Sherwood, C.C., **Raghanti, M.A.** (2021) A comparison of cell density and serotonergic innervation of the amygdala among four macaque species: *Macaca mulatta*, *M. fuscata*, *M. maura*, and *M. nemestrina*. *Journal of Comparative Neurology* 529, 1659-1658.

13. Neal Webb, S.J., Schapiro, S.J., Sherwood, C.C., **Raghanti, M.A.**, Hopkins, W.D. (2020) Neutrophil to lymphocyte ratio (NLR) in captive chimpanzees (*Pan troglodytes*): The effects of sex, age, and rearing. *PLOS ONE* <https://doi.org/10.1371/journal.pone.0244092>
14. Sherwood, C.C., Miller, S.B., Karl, M., Stimpson, C.D., Phillips, K.A., Jacobs, B., Hof, P.R., **Raghanti, M.A.**, Smaers, J.B. (2020) Invariant synapse density and neuronal connectivity scaling in primate neocortical evolution. *Cerebral Cortex* 30, 5604-5615.
15. Hanson, K.L., Lew, C.H., Hrvoj-Mihin, B., Cuevas, D., Greiner, D.Z., Groeniger, K.M., Edler, M.E., Halgren, E., Bellugi, U., **Raghanti, M.A.**, Semendeferi, K. (2020) Decreased density of cholinergic interneurons in striatal territories in Williams syndrome. *Brain Structure and Function* 225, 1019-1032. <https://doi.org/10.1007/s00429-020-02055-0>.
16. Edler, M.K., Munger, E.L.*, Hof, P.R., Hopkins, W.D., Ely, J.J., Erwin, J.M., Meindl, R.S., Mufson, E.J., Sherwood, C.C., **Raghanti, M.A.** (2020) Neuron loss associated with age but not Alzheimer's disease pathology in the chimpanzee brain. *Philosophical Transactions of the Royal Society B: Biological Sciences* 375, 20190619.
17. Jones, D.*, Ruiz, C.*, **Raghanti, M.A.**, Tosi, A.J., Tanaka, H., Goto, Y. (2020) Monoamine oxidase A length promoter polymorphism in rhesus and Japanese macaques (*Macaca mulatta* and *M. fuscata*). *Journal of Chemical Neuroanatomy* 103, 101726.
18. Eren, M.I., Bebbler, M.R.*, Norris, J.D.*, Perrone, A.*, Rutkoski, A.*, Wilson, M.*, **Raghanti, M.A.** (2019) Experimental replication shows knives manufactured from human feces do not work. *Journal of Archaeological Science*, 102002.
19. Dennis, P., **Raghanti, M.A.**, Meindl, R.S., Less, E., Henthorn, E., Devlin, W., Murray, S., Meehan, T., Kutinsky, I., Murphy, H. (2019) Cardiac disease is linked to adiposity in male gorillas (*Gorilla gorilla gorilla*). *PLOS ONE*.
20. Munger, E.L.*, Edler, M.K.*, Hopkins, W.D., Ely, J.J., Erwin, J.M., Perl, D.P., Mufson, E.J., Hof, P.R., Sherwood, C.C., **Raghanti, M.A.** (2019) Astrocytic changes with aging and Alzheimer's disease-type pathology in chimpanzees. *Journal of Comparative Neurology* 527, 1179-1195.
21. **Raghanti, M.A.**, Wicinski, B., Meierovich, R., Warda, T., Dickstein, D.L., Reidenberg, J.S., Tang, C.Y., Thewissen, J.G.M., Butti, C., Hof, P.R. (2019) A comparison of the cortical structure of the bowhead whale (*Balaena mysticetus*), a basal mysticete, with other cetaceans. *Anatomical Record, Part A* 302, 745-760.
22. Edler, M.K.*, Sherwood, C.C., Meindl, R.S., Munger, E.*, Hopkins, W.D., Ely, J.J., Erwin, J.M., Perl, D.P., Mufson, E.J., Hof, P.R., **Raghanti, M.A.** (2018) Microglia changes associated with Alzheimer's disease pathology in aged chimpanzees. *Journal of Comparative Neurology* 526, 2921-2936.

23. Spocter, M.A., Uddin, A., Ng, J.C., Wong, E., Wang, V.X., Tang, C., Wicinski, B., Haas, J., **Raghanti, M.A.**, Dunn, R., Hof, P.R., Sherwood, C.C., Jovanovik, J., Rusbridge, C., Manger, P.R. (2018) Scaling of the corpus callosum in wild and domestic canids: Insights into the domesticated brain. *Journal of Comparative Neurology* 526, 2341-2359.
24. **Raghanti, M.A.**, Edler, M.E.*, Stephenson, A.R.*, Munger, E.*, Jacobs, B., Hof, P.R., Sherwood, C.C., Holloway, R.L., Lovejoy, C.O. (2018) A neurochemical hypothesis for origin of hominids. *Proceedings of the National Academy of Science*.
www.pnas.org/cgi/doi/10.1073/pnas.1719666115 115, E1108-E1116.
25. Jacobs, B., Garcia, M.E., Shea-Shumsky, N.B., Tennison, M.E., Schall, M., Saviano, M.S., Tummino, T.A., Bull, A.J., Driscoll, L.L., **Raghanti, M.A.**, Lewandowski, A.H., Wicinski, B., Chui, H.K., Bertelsen, M.F., Walsh, T., Bhagwandin, A., Spocter, M.A., Hof, P.R., Sherwood, C.C., Manger, P.R. (2017) Comparative morphology of gigantopyramidal neurons in primary motor cortex across mammals. *Journal of Comparative Neurology* 526, 496-536.
26. Munger, E.*, Takemoto, A., **Raghanti, M.A.**, Nakamura, K. (2017) Visual discrimination and reversal learning in aged common marmosets (*Callithrix jacchus*). *Neuroscience Research* 124, 57-62.
27. Sousa, A.A.M., Zhu, Y., **Raghanti, M.A.**, Kitchen, R.R., Onorati, M., Tebbenkamp, A.T.N., Stutz, B., Meyer, K.A., Li, M., Kawasawa, Y.I., Liu, F., Perez, R.G., Mele, M., Carvalho, T., Skarica, M., Gulden, F.O., Pletikos, M., Shibata, A., Stephenson, A.R.*, Edler, M.K.*, Ely, J.J., Elsworth, J.D., Horvath, T.L., Hof, P.R., Hyde, T.M., Kleinman, J.E., Weinberger, D.R., Reimers, M., Lifton, R.P., Mane, S.M., Noonan, J.P., State, M.W., Lein, E.S., Knowles, J.A., Marques-Bonet, T., Sherwood, C.C., Gerstein, M.B., Šestan, N. (2017) Molecular and cellular reorganization of neural circuits in the human lineage. *Science* 358, 1027-1032.
28. Edler, M.K.*, Sherwood, C.C., Meindl, R.S., Hopkins, W.D., Ely, J.J., Erwin, J.M., Mufson, E.J., Hof, P.R., **Raghanti, M.A.** (2017) Aged chimpanzees exhibit pathologic hallmarks of Alzheimer's disease. *Neurobiology of Aging* 59, 107-120.
29. Duka, T., Collins, Z., Anderson, S.M., **Raghanti, M.A.**, Ely, J.J., Hof, P.R., Wildman, D.E., Goodman, M., Grossman, L.I., Sherwood, C.C. (2017) Divergent lactate dehydrogenase isoenzyme profile in cellular compartments of primate forebrain structures. *Molecular and Cellular Neuroscience*. 82, 137-142.
30. Fuller, G., Schook, M.W., **Raghanti, M.A.**, Dennis, P.M., Kuhar, C.W., Willis, M.A., Lukas, K.E. (2017) Behavioral and hormonal impacts of artificial night lighting for a nocturnal primate, *Periodicticus potto*. *Animal Keepers Forum* 44, 26-32.
31. Boddy, A.M., Harrison, P.W., Montgomery, S.H., Harrison, P.W., Caravas, J.A., **Raghanti, M.A.**, Phillips, K.A., Mundy, N.I., Wildman, D.E. (2017) Evidence of a conserved molecular response to selection for increased brain size in primates. *Genome Biology and Evolution* 9, 700-713.

32. Dos Santos, S.E., Porfirio, J., da Cunha, F., Manger, P., Tavares, W., Pessoa, L., **Raghanti, M.A.**, Sherwood, C.C. Herculano-Houzel, S. (2017) Cellular scaling rules for the brains of marsupials: not as primitive as expected. *Brain, Behavior and Evolution* 89, 48-63.
33. Charvet, C.J., Stimpson, C.D., Kim, Y.D., **Raghanti, M.A.**, Lewandowski, A.L., Hof, P.R., Gomez-Robles, A., Krienen, F.M., Sherwood, C.C. (2017) Gradients in cytoarchitectural landscapes of the isocortex: diprotodont marsupials in comparison to eutherian mammals. *Journal of Comparative Neurology* 525, 1811-1826.
34. Stephenson, A.R.*, Edler, M.E.*, Erwin, J.M., Jacobs, B., Hopkins, W.D., Hof, P.R., Sherwood, C.C., **Raghanti, M.A.** (2017) Cholinergic innervation of the basal ganglia among human and nonhuman primates. *Journal of Comparative Neurology* 525, 319-332.
35. Charvet, C.J., Hof, P.R., **Raghanti, M.A.**, Van der Kouwe, A.J., Sherwood, C.C., Takahashi, E. (2017) Combining diffusion magnetic resonance tractography with stereology highlights increased cross-cortical integration in primates. *Journal of Comparative Neurology* 525, 1075-1093.
36. Johnson, C.B., Schall, M., Tennison, M.E., Garcia, M.E., Shea-Shumsky, N.B., **Raghanti, M.A.**, Lewandowski, A.L., Bertelsen, M.F., Waller, L.C., Walsh, T., Roberts, J.F., Hof, P.R., Sherwood, C.C., Manger, P.R., Jacobs, B. (2016) Neocortical neuronal morphology in the Siberian tiger (*Panthera tigris altaica*) and the clouded leopard (*Neofelis nebulosa*). *Journal of Comparative Neurology* 524: 3641-3665.
37. Fuller, G., **Raghanti, M.A.**, Dennis, P.M., Kuhar, C.W., Willis, M.A., Schook, M.W., Lukas, K.E. (2016) A comparison of nocturnal primate behavior in exhibits illuminated with red and blue light. *Applied Animal Behavior Science* 184, 126-134.
38. Asmus, S.E., **Raghanti, M.A.**, Beyerle, E.R., Fleming, J.C., Hawkins, S.M., McKernan, C.M., Rauh, N. (2016) Tyrosine hydroxylase-producing neurons in the human cerebral cortex do not colocalize with calcium-binding proteins or the serotonin 3A receptor. *Journal of Chemical Neuroanatomy* 78, 1-9.
39. Ruth, A.A.*, **Raghanti, M.A.**, Meindl, R.S., Lovejoy, C.O. (2016) Locomotor pattern fails to predict foramen magnum angle in rodents, strepsirrhine primates, and marsupials. *Journal of Human Evolution* 94, 45-52.
40. Jacobs, B., Lee, L., Schall, M., **Raghanti, M.A.**, Lewandowski, A., Kottwitz, J.J., Roberts, J.F., Hof, P.R., Sherwood, C.C. (2016) Neocortical neuronal morphology in the newborn giraffe (*Giraffa camelopardalis tippelskirchi*) and newborn African elephant (*Loxodonta africana*). *Journal of Comparative Neurology* 524, 257-287.
41. **Raghanti, M.A.**, Edler, M.E.*, Stephenson, A.R.*, Wilson, L.J.**, Hopkins, W.D., Ely, J.J., Erwin, J.M., Jacobs, B., Hof, P.R., Sherwood, C.C. (2016) Human-specific increase in dopaminergic innervation in a striatal region associated with speech and language: a comparative analysis of the primate basal ganglia. *Journal of Comparative Neurology* 524, 2117-2129.

42. Reyes, L.D., Stimpson, C.D., Gupta, K., **Raghanti, M.A.**, Hof, P.R., Reep, R.L., Sherwood, C.C. (2015) Neuron types in the presumptive primary somatosensory cortex of the Florida manatee (*Trichechus manatus latirostris*). *Brain Behavior and Evolution* 86, 21-231.
43. Phillips, K.A., Stimpson, C.D., Smaers, J.B., **Raghanti, M.A.**, Jacobs, B., Popratiloff, A., Hof, P.R., Sherwood, C.C. (2015) The corpus callosum in primates: Processing speed of axons and the evolution of hemispheric asymmetry. *Proceedings of the Royal Society B* 282:20151535. <http://dx.doi.org/10.1098/rspb.2015.1535>.
44. Sensor, J.D., Suydam, R., Liberman, M.C., Lovano, D., **Raghanti, M.A.**, Usip, S., Vinyard, C.J., Thewissen, J.G.M. (2015) The spiral ganglion and Rosenthal's canal in Beluga whales. *Journal of Morphology* 276, 1455-1466.
45. Schook, M.W., Wildt, D.E., **Raghanti, M.A.**, Wolfe, B.A., Dennis, P.M. (2015) Increased inflammation and decreased insulin sensitivity indicate metabolic disturbances in zoo-housed managed compared to free-ranging black rhinoceros (*Diceros bicornis*). *General and Comparative Endocrinology* 217-218, 10-19.
46. Muntané, G., Horvath, J.E., Hof, P.R., Ely, J.J., Hopkins, W.D., **Raghanti, M.A.**, Lewandowski, A.H., Wray, G.A., Sherwood, C.C. (2015) Analysis of synaptic gene expression in primates reveals changes in glutamate processing. *Cerebral Cortex*, 25, 1596-1607.
47. **Raghanti, M.A.**, Spurlock, L.B., Treichler, F.R., Weigel, S.E.*, Stimmelmayer, G.R., Butti, C., Thewissen, J.G.M., Hof, P.R. (2015) An analysis of von Economo neurons in the cerebral cortex of cetaceans, artiodactyls, and perissodactyls. *Brain Structure and Function* 220, 2303-2314.
48. Jacobs, B., Johnson, N., Wahl, D., Schall, M., Maseko, B.C., Lewandowski, A., **Raghanti, M.A.**, Wicinski, B., Butti, C., Hopkins, W.D., Bertelsen, M.F., Walsh, T., Roberts, J.R., Reep, R.L., Hof, P.R., Sherwood, C.C., Manger, P.R. (2014) Comparative neuronal morphology of the cerebellar cortex in afrotherians, carnivores, cetartiodactyls, and primates. *Frontiers in Neuroanatomy* doi. 10.3389/fnana.2014.00024.
49. Duka, T., Anderson, S.M., Collins, Z., **Raghanti, M.A.**, Ely, J.J., Hof, P.R., Wildman, D.E., Goodman, M., Grossman, L.I., Sherwood, C.C. (2014) Synaptosomal lactate dehydrogenase isoenzyme composition is shifted toward aerobic forms in primate brain evolution. *Brain Behavior and Evolution* 83, 216-230.
50. Less, E.H., Lukas, K.E., Bergl, R., Ball, R., Kuhar, C.W., Lavin, S.R., **Raghanti, M.A.**, Wensvoort, J., Willis, M.A., Dennis, P.M. (2014) Implementing a low-starch biscuit-free diet in zoo gorillas: The impact on health. *Zoo Biology* 33, 74-80.
51. Less, E.H., Bergl, R., Ball, R., Dennis, P.M., Kuhar, C.W., Lavin, S.R., **Raghanti, M.A.**, Wensvoort, J., Willis, M.A., Lukas, K.A. (2014) Implementing a low-starch biscuit-free diet in zoo gorillas: The impact on behavior. *Zoo Biology* 33, 63-73.
52. **Raghanti, M.A.**, Edler, M.K.*, Meindl, R.S., Sudduth, J.*, Bohush, T.*, Erwin, J.M., Stimpson, C.D., Hof, P.R., Sherwood, C.C. (2014) Humans and great apes share increased neocortical

neuropeptide Y innervation compared to other haplorhine primates. *Frontiers in Human Neuroscience* doi:10.3389/fnhum.2014.00101.

53. Butti, C., Fordyce, E.R., **Raghanti, M.A.**, Gu, X., Bonar, C.J., Wicinski, B.A., Wong, E.W., Roman, J., Brake, A., Eaves, E. Tang, C.Y., Jacobs, B., Sherwood, C.C., Hof, P.R. (2014) The cerebral cortex of the pygmy hippopotamus, *Hexaprotodon liberiensis* (Cetartiodactyla, Hippopotamidae): MRI, cytoarchitecture, and neuronal morphology. *The Anatomical Record* 297, 670-700.

54. Barks, S.K., Bauernfeind, A.L., Bonar, C.J., Cranfield, M.R., de Sousa, A.A., Erwin, J.M., Hopkins, W.D., Lewandowski, A.H., Mudakikwa, A., Phillips, K.A., **Raghanti, M.A.**, Stimpson, C.D., Hof, P.R., Zilles, K., Sherwood, C.C. (2014) Variable temporo-insular cortex neuroanatomy in primates suggests a bottleneck effect in eastern gorillas. *Journal of Comparative Neurology* 522, 844-860.

55. Perez, S.E., **Raghanti, M.A.**, Hof, P.R., Kramer, L., Ikonomic, M.D., Lacor, P.N., Erwin, J.M., Sherwood, C.C., Mufson, E.J. (2013) Alzheimer's Disease pathology in the neocortex and hippocampus of the western lowland gorilla (*Gorilla gorilla gorilla*). *Journal of Comparative Neurology* 521, 4318-4338.

56. Bauernfeind, A.L., de Sousa, A.A., Avasthi, T., Dobson, S.D., **Raghanti, M.A.**, Lewandowski, A.H., Zilles, K., Semendeferi, K., Allman, J.M., Craig, A.D., Hof, P.R., Sherwood, C.C. (2013) A volumetric comparison of the insular cortex and its subregions in primates. *Journal of Human Evolution* 64, 263-279.

57. **Raghanti, M.A.**, Conley, T.**, Sudduth, J.*, Erwin, J.M., Stimpson, C.D., Hof, P.R., Sherwood, C.C. (2013) Neuropeptide Y-immunoreactive neurons in the cerebral cortex of humans and other haplorhine primates. *American Journal of Primatology* 75, 415-424.

58. Sayers, K. **Raghanti, M.A.**, Lovejoy, C.O. (2012) Human evolution and the chimpanzee referential doctrine. *Annual Review of Anthropology* 41, 119-138.

59. Muehlenbein, M.P., Ancrenaz, M., Sakong, R., Ambu, L., Prall, S., Fuller, G., **Raghanti, M.A.** (2012) Ape conservation physiology: Fecal glucocorticoid responses in wild *Pongo pygmaeus morio* following human visitation. *PLoS One* doi:10.1371/journal.pone.0033357.

60. Sherwood, C.C., Bauernfeind, A.L., Bianchi, S., **Raghanti, M.A.**, Hof, P.R. (2012) Human brain evolution writ large and small. *Progress in Brain Research* 195, 237-254.

61. Eaton, J.L., Roache, L., Nguyen, K.N., Cushing, B.S., Troyer, E., Papademetriou, E., **Raghanti, M.A.** (2012) Organizational effects of oxytocin on serotonin innervation. *Developmental Psychobiology* 54, 92-97.

62. **Raghanti, M.A.**, Simic, G., Watson, S**, Stimpson, C.D., Hof, P.R., Sherwood, C.C. (2011) Comparative analysis of the nucleus basalis of Meynert among primates. *Neuroscience* 184, 1-15.

63. Butti, C., **Raghanti, M.A.**, Sherwood, C.C., Hof, P.R. (2011) The neocortex of cetaceans:

cytoarchitecture and comparison with other aquatic and terrestrial species. *Annals of the New York Academy of Sciences* 1225, 47-58.

64. **Raghanti, M.A.**, Spocter, M.A., Butti, C., Hof, P.R., Sherwood, C.C. (2010) A comparative perspective on minicolumns and inhibitory GABAergic interneurons in the neocortex. *Frontiers in Neuroanatomy* doi:10.3389/neuro.05.035.2010.

65. Treichler, F.R., **Raghanti, M.A.** (2010) Monkeys Combining Serial Lists: Test Cues and Linking. *Animal Cognition* 13, 121-131.

66. Sherwood, C.C., **Raghanti, M.A.**, Stimpson, C.D., Uddin, M., Spocter, M.A., Bonar, C.J., Phillips, K.A., Preuss, T.M., Erwin, J.M., Hof, P.R. (2010) Inhibitory interneurons of the human frontal cortex: evolution of the phenotype and related genes. *Proceedings of the Royal Society B: Biological Sciences* 299, 1011-1020.

67. **Raghanti, M.A.**, Spocter, M.A., Stimpson, C.D., Erwin, J.M., Bonar, C.J., Allman, J.M., Hof, P.R., Sherwood, C.C. (2009) Species-specific distributions of tyrosine hydroxylase-immunoreactive neurons within the prefrontal cortex of anthropoid primates. *Neuroscience* 158, 1551-1559.

68. **Raghanti, M.A.**, Stimpson, C.D., Marcinkiewicz, J.L., Erwin, J.M., Hof, P.R., Sherwood, C.C. (2008) Cortical dopaminergic innervation among humans, chimpanzees, and macaque monkeys: A comparative study. *Neuroscience* 155, 203-220.

69. **Raghanti, M.A.**, Stimpson, C.D., Marcinkiewicz, J.L., Erwin, J.M., Hof, P.R., Sherwood, C.C. (2008) Cholinergic innervation of the frontal cortex: Differences among humans, chimpanzees, and macaques. *Journal of Comparative Neurology* 506, 409-424.

70. **Raghanti, M.A.**, Stimpson, C.D., Marcinkiewicz, J.L., Erwin, J.M., Hof, P.R., Sherwood, C.C. (2008) Differences in cortical serotonergic innervation among humans, chimpanzees, and macaque monkeys: A comparative study. *Cerebral Cortex* 18, 584-597.

71. Treichler, F.R., **Raghanti, M.A.**, Van Tilburg, D.N. (2007) Serial list linking by macaque monkeys (*Macaca mulatta*): List property limitations. *Journal of Comparative Psychology* 121, 250-259.

72. Sherwood, C.C., **Raghanti, M.A.**, Stimpson, C.D., Bonar, C.J., de Sousa, A.J., Preuss, T.M., and Hof, P.R. (2007) Scaling of inhibitory interneurons in areas V1 and V2 of anthropoid primates as revealed by calcium-binding protein immunohistochemistry. *Brain, Behavior and Evolution* 69, 176-195.

73. Sherwood, C.C., Stimpson, C.D., **Raghanti, M.A.**, Wildman, D.E., Uddin, M., Grossman, L.I., Goodman, M., Redmond, J.C., Bonar, C.J., Erwin, J.M., Hof, P.R. (2006) Evolution of increased glial cell density in the human frontal cortex. *Proceedings of the National Academy of Sciences* 103, 13606-13611.

74. Ulyan, M.J., Burrows, A.E., Buzzell, C.A., **Raghanti, M.A.**, Marcinkiewicz, J.L., Phillips, K.A. (2006) The effects of predictable and unpredictable feeding schedules on the behavior and physiology of captive brown capuchins (*Cebus apella*). *Applied Animal Behavior Science* 101, 154-160.
75. Sherwood, C.C., **Raghanti, M.A.**, Wenstrup, J.J. (2005) Is humanlike cytoarchitectural asymmetry present in another species with social vocalization? A stereologic analysis of mustached bat auditory cortex. *Brain Research* 1045, 164-174.
76. Treichler, F.R., **Raghanti, M.A.**, Van Tilburg, D.N. (2003) Linking of serially ordered lists by macaque monkeys: List position influences. *Journal of Experimental Psychology: Animal Behavior Processes* 29, 211-221.
77. Norconk, M.A., **Raghanti, M.A.**, Martin, S.K., Grafton, B.W., Gregory, L.T., De Dijn, B. (2003) Primates of Brownsberg Natuurpark, Suriname, with particular attention to the Pitheciins. *Neotropical Primates* 11, 94-100.

BOOK CHAPTERS

1. Edler, M.E., Munger, E.L.*, Groetz, H., **Raghanti, M.A.** (2021) Nonhuman primates as models for aging and Alzheimer's disease. In *Assessments, Treatments and Modeling in Aging and Neurological Disease*. Martin, C.R., Preedy, V.R., Rajendram, R., Editors. Elsevier.
2. Ridgway, S., Hof, P.R., **Raghanti M.A.** (2020) Brain and Peripheral Nervous System. In *The Bowhead Whale: Balaena mysticetus: Biology and Human Interactions*. Thewissen, J.G.M, and George, J.C., Editors. Elsevier.
3. **Raghanti, M.A.**, Munger, E.A.*, Wicinski, B., Butti, C., Jacobs, B., Hof, P.R. (2017) Comparative structure of the cerebral cortex in large mammals. In *Evolution of Nervous Systems 2e*, Volume 2, pp 267-289. Kaas, J.H., Editor. Elsevier.
4. Sherwood, C.C., Bauernfeind, A.L., Verendeev, A., **Raghanti, M.A.**, Hof, P.R. (2017) Evolutionary specializations of human brain microstructure. In *Evolution of Nervous Systems 2e*. Kaas, J.H., Editor. Volume 4, pp 121-139. Elsevier.
5. Spocter, M.A., **Raghanti, M.A.**, Sherwood, C.C. (2015) The minicolumn in comparative context: variation and evolution in the cortical column. In *Recent Advances on the Modular Organization of the Cerebral Cortex*, pp 63-80. Casanova, M. and Opris, I., Editors. Springer Publishing.
6. **Raghanti, M.A.**, Spurlock, L.B., Uppal, N., Sherwood, C.C., Butti, C., Hof, P.R. (2015) Von Economo neurons. In *Brain Mapping: An Encyclopedic Reference*, vol. 2, pp 81-91. Academic Press: Elsevier.

7. **Raghanti, M.A.**, Hof, P.R., Sherwood, C.C. (2010) The evolution of cortical neurotransmitter systems among primates and their relevance to cognition, pp 195-212. In *The Human Brain Evolving: Paleoneurological studies in honor of Ralph L. Holloway*. Broadfield, D., Yuan, M., Schick, K., Toth, N. Editors.

INVITED COMMENTARY/EDITORIAL

Raghanti, M.A. (2019) Domesticated species: It takes one to know one. *Proceedings of the National Academy of Science* 116, 14401-14403.

Raghanti, M.A., Todd, N., Hof, P.R. (2015) Probing the Proboscidea: Lessons from the past. *Journal of Comparative Neurology* 523, 2321-2325.

PUBLISHED ABSTRACTS/PRESENTATIONS

1. Jones, D.N.*, Hirter, K.N.*, Munger, E.L.*, Sherwood, C.C., Hof, P.R., Hopkins, W.D., **Raghanti, M.A.** (2022) A comparison of cannabinoid receptor 1-immunoreactive axon density in the amygdala among nine primate species. Society for Neuroscience

2. Jones, D.N.*, Munger, E.L.*, Hirter, K.N.*, Smith, H.N.*, Sherwood, C.C., Hof, P.R., **Raghanti, M.A.** (2021) Japanese and pigtailed macaques differ in amygdala cannabinoid 1 receptor immunoreactive axon density. Society for Neuroscience.

3. Smith, Heather N.*, Jones, D.N.*, Munger, E.L.*, Hof, P.R., Sherwood, C.C., **Raghanti, M.A.** (2021) Serotonin innervation of the ventral pallidum and nucleus accumbens is conserved among primates. Society for Neuroscience.

4. Tennant, K., Less, E., Amendolagine, L., **Raghanti, M.A.**, Lukas, K., Dennis, P. (2021) Using an oral sugar test to biologically validate the use of commercial assays to measure salivary insulin, salivary glucose and urinary c-peptide in western lowland gorillas (*Gorilla gorilla gorilla*). International Society for Wildlife Endocrinology.

5. Leach, R.*, Zirkle, D.*, Nishimura, T., Meindl, R.S., **Raghanti, M.A.**, Lovejoy, C.O. (2021) Examining long bone plasticity: A case study of skeletal differences between norther and southern Japanese macaques. American Association of Physical Anthropology.

6. Hanson, K.L., **Raghanti, M.A.** (2020) Subcortical systems in human evolution. American Association of Physical Anthropologists. Invited paper. Meeting cancelled due to COVID-19.

7. Jones, D.N*, Ruiz, C.A., **Raghanti, M.A.**, Tosi, A.J., Tanaka, H., Goto, Y. (2020) Monoamine oxidase polymorphisms in Japanese and rhesus macaques (*Macaca fuscata* and *M. mulatta*). The Allied Genetics Conference (TAGC).
8. **Raghanti, M.A.**, Lovejoy, C.O. (2019) Reconsidering human origins in light of striatal neurochemistry. American Association of Physical Anthropologists. Invited paper.
9. Lawrentz, H. Meindl, R.S., **Raghanti, M.A.**, Lovejoy, C.O. (2019) A comparative analysis of carpometacarpal joints four and five in various hominoid and cercopithecoid species. American Association of Physical Anthropologists. Invited paper.
10. Edler, M.K., Munger, E.L., Hof, P.R., Hopkins, W.D., Ely, J.J., Erwin, J.M., Meindl, R.S., Mufson, E.J., Sherwood, C.C., **Raghanti, M.A.** (2019) Region-specific, age- and pathology-related changes in neuron density in the chimpanzee brain. American Association of Physical Anthropologists. Invited paper.
11. Dennis, P.M., **Raghanti, M.A.**, Meindl, R.S., Less, E., Devlin, W., Murray, S., Meehan, T., Kutinsky, I., Murphy, H. (2018) Cardiac disease and adiposity are linked in male gorillas (*Gorilla gorilla gorilla*). American Association of Zoo Veterinarians, the European Association of Zoo and Wildlife Veterinarians, and the Leibniz Institute for Zoo and Wildlife Research joint conference.
12. Bauernfeind, A.L., Ely, J.J., **Raghanti, M.A.**, Hopkins, W.D., Hof, P.R., Sherwood, C.C., Babbitt, C.C. (2018) Evolution of regional gene expression in the cerebellum of primates. American Association of Physical Anthropologists abstract.
13. Babbitt, C.C., Ely, J.J., **Raghanti, M.A.**, Hopkins, W.D., Hof, P.R., Sherwood, C.C., Bauernfeind, A.L. (2018) Tempo and mode of gene expression evolution in the brain across the primate tree. American Association of Physical Anthropologists abstract.
14. Zintel, T.M., Ely, J.J., **Raghanti, M.A.**, Hopkins, W.D., Hof, P.R., Sherwood, C.C., Kamilar, J., Bauernfeind, A.L., Babbitt, C.C. (2018) Gene expression in the primary visual cortex differs amongst phenotypically distinct primates. American Association of Physical Anthropologists abstract.
15. Ruth, A.A. *, **Raghanti, M.A.**, Lovejoy, C.O. (2018) Foramen magnum position and angle reflect neural reorganization. American Association of Physical Anthropologists abstract.
16. Dos Santos, S.E., Da Cunha, F.B., Porfirio, J., Messeder, D.J., Manger, P., Tavares, W., Pessoa, L., **Raghanti, M.A.**, Sherwood, C.C., Herculano-Houzel, S. (2017) U-shaped distribution of the neuronal density along the anteroposterior axis of the cerebral cortex sheds a new light on cortical expansion in mammals. Society for Neuroscience.
17. Takemoto, A., Munger, E.*, **Raghanti, M.A.**, Nakamura, K. (2017) Deterioration of visual learning in aged marmosets. Society for Neuroscience.

18. Jacobs, B., Garcia, M.E., Shea-Shumsky, N.B., Tennison, M.E., Sloan, L., Warling, A., Schall, M., Bull, A.J., **Raghanti, M.A.**, Lewandowski, A.H., Wicinski, B., Chui, H.K., Bertelsen, M.F., Walsh, T., Bhagwandin, A., Spocter, M.A., Hof, P.R., Sherwood, C.C., Manger, P.R. (2017) Comparative morphology of gigantopyramidal neurons in primary motor cortex across mammals. Society for Neuroscience.
19. **Raghanti, M.A.** (2017) Dopamine innervation in the cortico-basal ganglia pathway of humans and nonhuman primates and its relevance to social cognition. 5th Congress of the Asian College of Neuropsychopharmacology. Bali, Indonesia. Invited paper.
20. Ruth, A.A.*, **Raghanti, M.A.**, Lovejoy, C.O. (2017) Comparative anatomy of the anterior cruciate ligament insertions in primates. American Association of Anatomists.
21. Duka, T.I., Anderson, S., Collins, Z., **Raghanti, M.A.**, Ely, J.J., Hof, P.R., Wildman, D.E., Grossman, L.I., Sherwood, C.C. (2016) Intercellular distributions of lactate dehydrogenase isoenzymes in the primate forebrain. Society for Neuroscience.
22. Johnson, C.B., Schall, M., Tennison, M.E., Garcia, M.A., Shea-Shumsky, N.B., **Raghanti, M.A.**, Lewandowski, A.H., Bertelsen, M.F., Waller, L., Walsh, T., Roberts, J.F., Hof, P.R., Sherwood, C.C., Manger, P.R., Jacobs, B. (2016) Neocortical neuronal morphology in the Siberian tiger (*Panthera tigris altaica*) and the clouded leopard (*Neofelis nebulosi*). Society for Neuroscience.
23. Edler, M.K.*, Hof, P.R., Mufson, E.J., Meindl, R.S., Hopkins, W.D., Ely, J.J., Erwin, J.M., Sherwood, C.C., **Raghanti, M.A.** (2016) Microglia changes associated with AD pathology in aged chimpanzees. Alzheimer's Association International Conference.
24. Charvet, C.J., Mongold, S.J., **Raghanti, M.A.**, Kim Y.D., Van der Kouwe, A., Takahashi, E., Sherwood, C.C. (2016) Cortical upper layer neurons of primates stand out: a comparative analysis of molecular expression, neuron numbers, and diffusion MR tractography between the brains of primates and rodents. International Primatological Society.
25. **Raghanti, M.A.**, Edler, M.K.*, Stephenson, A.R.*, Wilson, L.J.**, Hopkins, W.D., Ely, J.J., Erwin, J.M., Jacobs, B., Hof, P.R., Sherwood, C.C. (2016) Dopaminergic innervation of the medial caudate nucleus in humans: implications for the evolution of speech and language. American Association of Physical Anthropologists; American Journal of Physical Anthropology. Invited.
26. Munger, E.L.*, Edler, M.K.*, Hopkins, W.D., Erwin, J.M., Hof, P.R., Sherwood, C.C., **Raghanti, M.A.** (2015) Astrocyte density and hypertrophy in aging chimpanzees. Society for Neuroscience Abstract.
27. Stephenson, A.R.*, Edler, M.K.*, Wilson, L.J.**, Erwin, J.M., Hopkins, W.D., Hof, P.R., Sherwood, C.C., **Raghanti, M.A.** (2015) A comparative study of the cholinergic innervation of the basal ganglia among human and nonhuman primate species. Society for Neuroscience Abstract.

28. Edler, M.K.*, Hof, P.R., Mufson, E.J., Hopkins, W.D., Ely, J.J., Erwin, J.M., Sherwood, C.C., **Raghanti, M.A.** (2015) Alzheimer's disease pathology in aged chimpanzees. Society for Neuroscience Abstract.
29. Charvet, C.J., Stimpson, C.D., **Raghanti, M.A.**, Lewandowski, A.H., Krienen, F.M., Sherwood, C.C. (2015) Cytoarchitectural landscapes across the marsupial and primate isocortex highlights shared and derived characters across mammals. Society for Neuroscience Abstract.
30. Ruth, A.A.*, **Raghanti, M.A.**, Lovejoy, C.O. (2015) Bundle Number and bipedality: probing the comparative anatomy of the anterior cruciate ligament. American Journal of Physical Anthropology.
31. Munger, E.L.** , Edler, M.K.*, Hof, P.R., Hopkins, W.D., Erwin, J.M., Sherwood, C.C., **Raghanti, M.A.** (2014) Age-related neuronal changes in the chimpanzee hippocampus. Society for Neuroscience Abstract.
32. Duka, T.I., Baker, J., Collins, Z., Anderson, S.M., **Raghanti, M.A.**, Ely, J.J., Hof, P.R., Wildman, D.E., Grossman, L.I., Sherwood, C.C. (2014) AMPA receptor GluR2 subunit expression level is upregulated in synapses of the cerebral cortex across primates. Society for Neuroscience Abstract.
33. Dos Santos, S.E., Porfirio, J., Barros Da Cunha, F., **Raghanti, M.A.**, Sherwood, C.C., Herculano-Houzel, S. (2014) Cellular scaling rules for marsupial brains. Society for Neuroscience Abstract.
34. Jacobs, B.G., Johnson, N.L., Wahl, D., Johnson, C.B., Mohr, D., Kopec, B., Schall, M., Maseko, B.C., Lewandowski, A.L., **Raghanti, M.A.**, Wicinski, B., Butti, C., Hopkins, W.D., Bertelsen, M.F., Walsh, T., E Roberts, J.R., Reep, R.L., Hof, P.R., Sherwood, C.C., Manger, P.R. (2014) Comparative neuronal morphology of the cerebellar cortex in afrotherians, carnivores, cetartiodactyls, and primates. Society for Neuroscience Abstract.
35. Phillips, K.A., Stimpson, C.D., Smaers, J.B., **Raghanti, M.A.**, Popratiloff, A., Hof, P.R., Sherwood, C.C. (2014) Biophysical constraints on the processing speed of axons conveyed by the corpus callosum: Possible role in the evolution of hemispheric asymmetry. Society for Neuroscience Abstract.
36. Fuller, G, Wilder Schook, M., **Raghanti, M.A.**, Kuhar, C.W., Dennis, P.M., Lukas, K.E. (2014) Behavioral and endocrine responses to enclosure lighting in captive nocturnal strepsirhine primates. Primate Society of Great Britain.
37. Duka, T., Collins, Z., Anderson, S.M., **Raghanti, M.A.**, Ely, J.J., Hof, P.R., Wildman, D.E., Grossman, L.I., Sherwood, C.C. (2014) Phylogenetic variation in subcellular distribution and isoenzyme composition of energy metabolism enzyme, Lactate Dehydrogenase, in primate brain evolution. American Journal of Physical Anthropology.

38. Reyes, L.D., Smaers, J.B., Grinker, O., **Raghanti, M.A.**, Hof, P.R., Sherwood, C.C. (2014) Reorganization of cerebral cortical layers in primates compared to other mammals. *American Journal of Physical Anthropology*.
39. **Raghanti, M.A.**, Spurlock, L.B., Treichler, F.R., Heinrichs, N.T.*, George, J.C., Stimmelmayer, R., Butti, C., Thewissen, J.G.M., Hof, P.R. (2013) An analysis of von Economo neurons within the cerebral cortex of cetaceans, artiodactyls, and perissodactyls; emerging evidence for a phylogenetically ancient neuron type. Society for Neuroscience Abstract.
40. Lee, L., Johnson, N., Waller, L., **Raghanti, M.A.**, Lewandowski, A.H., Kottwitz, J.J., Roberts, J.F., Manger, P.R., Hof, P.R., Sherwood, C.C., Jacobs, B. (2013) Neocortical neuron morphology in the infant giraffe (*Giraffa camelopardalis tippelskirchi*) and infant African elephant (*Loxodonta africana*). Society for Neuroscience Abstract.
41. Barks, S.K., Bauernfeind, A.L., Hof, P.R., Hopkins, W.D., **Raghanti, M.A.**, Cranfield, M.R., Mudakikwa, A., de Sousa, A.A., Zilles, K., Sherwood, C.C. (2013) Variable temporal-insular neuroanatomy in primates with attention to Eastern gorillas (*Gorilla beringei*). *American Journal of Physical Anthropology*.
42. **Raghanti, M.A.**, Sudduth, J.*, Bohush, T.*, Erwin, J.M., Hof, P.R., Sherwood, C.C. (2012) Humans and great apes share layer- and area-specific increases in cortical neuropeptide Y innervation. Society for Neuroscience Abstract.
43. Mufson, E.J., Perez, S., Mohammedtedad, N., Kramer, L., Ikonovic, M.D., Abramson, E., Hof, P.R., **Raghanti, M.A.** (2012) Gorilla cortex exhibits human-like amyloid plaques but not classic neurofibrillary tangle pathology. Society for Neuroscience Abstract.
44. Baker, J.L., Duka, T., Maynard, T.M., Wood, B., Hof, P.R., Ely, J.J., Baze, W.B., Schapiro, S.J., **Raghanti, M.A.**, Lewandowski, A.H., Wildman, D.E., Sherwood, C.C. (2012) The molecular evolution of NMDA receptors in the human lineage. Society for Neuroscience Abstract.
45. Fuller, G., **Raghanti, M.A.**, Vick, M., Kuhar, C., Dennis, P., Lukas, K. (2012) A pilot study of the effects of light exposure on salivary melatonin in the potto (*Perodicticus potto*) and pygmy loris (*Nycticebus pygmaeus*). International Primatological Society.
46. Boddy, A.M., **Raghanti, M.A.**, Sherwood, C.C., Phillips, K.A., Grossman, L.I., Montgomery, S.H., Mundy, N.I., Wildman, D.E. (2012) Capuchin monkey transcriptome provides insight into primate brain evolution. Society for Molecular Biology and Evolution.
47. **Raghanti, M.A.**, Bohush, T.*, Sudduth, J.*, Erwin, J.M., Hof, P.R., Sherwood, C.C. (2012) Species-specific distributions of cholinergic innervation in the neocortex of anthropoid primates. *American Journal of Physical Anthropology*.
48. Muehlenbein, M., Ancrenaz, M., Sakong, R., Prall, S., Fuller, G., **Raghanti, M.A.** (2012) Fecal glucocorticoid responses in wild orangutans following human visitation. *American Journal of Physical Anthropology*.

49. Sprockett, D., Muhlberger, A.*, **Raghanti, M.A.**, Norconk, M.A., Chiu, C-H. (2012) An integrative approach to understanding primate mating systems: oxytocin and New World monkeys. *American Journal of Physical Anthropology*.
50. **Raghanti, M.A.**, Conley, T.**, Erwin, J.M., Hof, P.R., Sherwood, C.C. (2011) Neuropeptide Y-immunoreactive neurons in the cerebral cortex of humans and other anthropoid primates. *Society for Neuroscience Abstract*.
51. Fuller, G., Vick, M.M., **Raghanti, M.A.**, Kuhar, C., Dennis, P., Lukas, K. (2011) Validation of an assay for measurement of salivary melatonin in nocturnal primates. *North American Society for Comparative Endocrinology*.
52. Hoellein Less, E., Bergl, R., Kuhar, C., Wensvoort, J., **Raghanti, M.A.**, Dennis, P., Lavin, S., Ball, R., Lukas, K. (2011) Effect of diet on undesirable behaviors in zoo gorillas. *International Society of Applied Ethologists*.
53. Vick, M.M, Wildt, D.E., **Raghanti, M.A.**, Wolfe, B.A., Dennis, P.M. (2010) Determining factors associated with iron overload in the black rhinoceros (*Diceros bicornis*). *International Society of Wildlife Endocrinologists*.
54. **Raghanti, M.A.**, Golden, G.D., Watson, S.**, Hof, P.R., Sherwood, C.C. (2010) Comparative analysis of the nucleus basalis of Meynert among primates. *Society for Neuroscience Abstract*.
55. Butti, C., **Raghanti, M.A.**, Bonar, C.J., Rodriguez, C.E., Reidenberg, J.S., Wicinski, B.A., Stimpson, C., Brake, A.G., Sherwood, C.C., Hof, P.R. (2010) The insular cortex: a comparative perspective. *Society for Neuroscience Abstract*.
56. Duka, T., Papper, Z., Stimpson, C.D., Anderson, S., Bonar, C.J., **Raghanti, M.A.**, Wildman, D.E., Sherwood, C.C. (2010) Phylogenetic variation in the methylation of lactate dehydrogenase LDHA and LDHB promoters and isoenzyme expression patterns in the primate cerebral cortex. *Society for Neuroscience Abstract*.
57. Hoellein Less, E., Kuhar, C., Lukas, K., **Raghanti, M.A.**, Dennis, P., Lavin, S.R., Ball, R., Bergl, R. (2010) Preliminary behavior and health effects of a biscuit-free diet in captive gorillas. *Crissey Animal Nutrition Symposium*.
58. Long, L.J., **Raghanti, M.A.**, Dennis, P.M. (2010) Examination into the use of serologic biomarkers Leptin, IGF-1 and Insulin:Glucose in the assessment of giraffe health. *First Annual International Giraffe Conference, Phoenix, AZ*.
59. Henthorn, E.*, Dennis, P.M., Murphy-Weston, H., Kutinsky, I., Devlin, W., **Raghanti, M.A.** (2010) The association between several serum biomarkers and cardiovascular disease status in captive western lowland gorillas (*G. gorilla gorilla*). *American Journal of Physical Anthropology*.
60. Ruth, A.*, **Raghanti, M.A.**, Meindl, R.M., Lovejoy, C.O. (2010) Foramen magnum position is influenced by neocortex size but not posture. *American Journal of Physical Anthropology*.

61. Chowdry, P., **Raghanti, M.A.**, Peterson, C., Samii, V., Funk, J., Dennis, P. (2009) Nutritional and behavioral contributions to oral diseases in captive red kangaroos (*Macropus rufus*). Morris Animal Foundation Annual Meeting.
62. Eaton, J., Roache, L.E., Troyer, E.A., Cushing, B.S., **Raghanti, M.A.** (2009) Neonatal oxytocin manipulations affect adult serotonergic innervation in prairie voles. Society for Neuroscience Abstract.
63. Butti, C., Bauerfeind, A., Spocter, M.A., Marino, L., Manger, P.R., Wicinski, B.A., **Raghanti, M.A.**, Sherwood, C.C., Hof, P.R. (2009) The glia-neuron index in the neocortex of Cetartiodactyla and Afrotheria: implications for mammalian brain evolution. Society for Neuroscience Abstract.
64. Hof, P.R., Butti, C., Romano, B., Biancani, B., Tuttle, A.D., Sirpenski, G., Rodriguez, C.E., Bonar, C.J., Marino, L., **Raghanti, M.A.**, Sherwood, C.C. (2009) The neocortical organization of Cetacea, Sirenia, and Carnivora: A comparative study. Society for Neuroscience Abstract.
65. Sherwood, C.C., **Raghanti, M.A.**, Stimpson, C.D., Spocter, M.A., Bonar, C.J., Phillips, K.A., Allman, J.M., Erwin, J.M., Hof, P.R. (2009) Inhibitory interneurons and the evolution of the human frontal cortex. American Journal of Physical Anthropology.
66. **Raghanti, M.A.**, Erwin, J.M., Hof, P.R., Sherwood, C.C. (2008) The distribution of tyrosine hydroxylase-immunoreactive neurons in prefrontal cortical regions of Old World monkeys, apes, and humans. Society for Neuroscience Abstract.
67. Sherwood, C.C., **Raghanti, M.A.**, Stimpson, C.D., Bonar, C.J., Phillips, K.A., Allman, J.M., Preuss, T.M., Erwin, J.M., Hof, P.R. (2008) Inhibitory interneurons and the evolution of human frontal cortex. Society for Neuroscience Abstract.
68. Hof, P.R., Butti, C., Allman, J.M., Hakeem, A., Tetreault, N.A.F., Carpenter, D., Tang, C.Y., Dickstein, D.L., Harry, S., Bonar, C.J., **Raghanti, M.A.**, Sherwood, C.C. (2008) The brain of the pygmy hippopotamus, *Hexaprotodon liberiensis* (Artiodactyla, Hippopotamidae): comparative histology, immunohistochemistry, and magnetic resonance imaging. Society for Neuroscience Abstract.
69. **Raghanti, M.A.**, Sherwood, C.C., Hof, P.R., Erwin, J.M. (2008) Evolutionary changes in cortical neuromodulator innervation within the frontal cortex of humans, chimpanzees, and macaque monkeys. American Journal of Primatology 70, S1, Abstract #36.
70. **Raghanti, M.A.**, Stimpson, C.D., Marcinkiewicz, J.L., Erwin, J.M., Hof, P.R., Sherwood, C.C. (2008) Differences in cortical dopaminergic innervation among humans, chimpanzees, and macaque monkeys: A comparative study. American Journal of Physical Anthropology S46.
71. **Raghanti, M.A.**, Stimpson, C.D., Marcinkiewicz, J.L., Erwin, J.M., Hof, P.R., Sherwood, C.C. (2007) Differences in cortical serotonergic innervation among humans, chimpanzees, and macaque monkeys. Society for Neuroscience Abstract.

72. **Raghanti, M.A.**, Stimpson, C.D., Erwin, J.M., Hof, P.R., Sherwood, C.C. (2006) Differences in tyrosine hydroxylase and choline acetyltransferase-containing fibers in prefrontal area 9L of humans, chimpanzees and macaque monkeys. Society for Neuroscience Abstract.
73. Sherwood, C.C., Stimpson, C.D., **Raghanti, M.A.**, Wildman, D.E., Uddin, M., Grossman, L.I., Goodman, M., Redmond, J.C., Bonar, C.J., Erwin, J.M., and Hof, P.R. (2006) Evolution of increased glial cell density in the human frontal cortex. Society for Neuroscience Abstract.
74. Treichler, F.R., **Raghanti, M.A.** (2005) Monkey linking serial lists: A test of episodic memory. International Conference on Comparative Cognition, Melbourne, Florida. Abstract #
75. **Raghanti, M.A.**, Wenstrup, J.J., Sherwood, C.C. (2005) Is humanlike lateralization of cytoarchitecture found in other species with complex social vocalization? A stereologic examination of mustached bat auditory cortex. American Journal of Physical Anthropology S40.
76. Sherwood, C.C., **Raghanti, M.A.**, Wahl, E., de Sousa, A., Erwin, J.M., and Hof, P.R. (2005) Scaling of inhibitory microcircuitry in areas V1 and V2 of anthropoid primates as revealed by calcium-binding protein immunohistochemistry. Society for Neuroscience Abstract.
77. Buzzell, C.A., Ulyan, M.J., **Raghanti, M.A.**, Burrows, A. E., Phillips, K. A. (2004) Behavioral and physiological consequences of feeding routines in *Cebus apella*. American Journal of Primatology 62, S1, Abstract # 94.
78. **Raghanti, M.A.**, Norconk, M.A., Marcinkiewicz, J.L. (2003) Fecal cortisol levels in wild vs. captive white-faced sakis (*Pithecia pithecia*): A preliminary assessment. American Journal of Primatology 60, S1, Abstract # 149.
79. Treichler, F.R., **Raghanti, M.A.** (2003) Monkeys linking serial lists: Test cues and link training. Abstracts of the Psychonomic Society 8, 79.
80. **Raghanti, M.A.**, Phillips, K.A., Norconk, M.A., Marcinkiewicz, J.L. (2002) Brown capuchins (*Cebus apella*) and salivary cortisol: Response to isolation and correlations with dominance. American Journal of Primatology 57, S1, Abstract # 45.
81. Grafton, B.W., Norconk, M.A., **Raghanti, M.A.** (2002) Seed dispersal by the white-faced saki (*Pithecia pithecia*), a neotropical seed predator. American Journal of Primatology 57, S1, Abstract # 42.
82. Treichler, F.R., **Raghanti, M.A.**, Van Tilburg, D.N. (2001) Serial list linking by macaques: List position influences. Abstracts of the Psychonomic Society 6, 57.

INVITED PRESENTATIONS

- | | |
|------|--|
| 2008 | The evolution of neuromodulatory transmitter systems and primate cognition
James S. McDonnell Foundation network meeting, Washington D.C., March 16 |
|------|--|

- 2008 Brain evolution as revealed by comparative neuroanatomy
Hiram College, Hiram, Ohio October 1.
- 2009 Neurotransmitters and human brain evolution.
Ecophilia Society, Museum of Natural History, Cleveland, April 16.
- 2010 Human brain evolution and neurotransmission
NEOUCOMP, January 28.
- 2011 Brain evolution as revealed by comparative anatomy
School of Biomedical Sciences seminar, April 13
- 2012 Science of Attraction: What's love got to do with it?
Roundtable discussion, Hanna Theatre, Playhouse Square, Cleveland, April 27
- 2016 The evolving brain: Determining human-specific neuroanatomical
specializations.
Primate Research Institute, Kyoto University, Inuyama, Japan. January 28.
- 2016 The evolving brain: The role of neurotransmitters in the evolution of speech and
language.
Kyoto University, Kyoto, Japan. February 2.
- 2018 At the beginning: A neurochemical hypothesis for human origins.
Gordon Research Conference: Neurobiology of Cognition (AAAS). Newry,
Maine. June 22-27.
- 2020 NSF Research Proposals. NSF Grant Writing Workshop, KSU. May 19.
- 2020 Does neurochemistry make us human? 8th Brain Health Research Institute
Symposium, KSU. October 8-9.
- 2020 The Science of Mindfulness and Meditation: An Invitation to the Practice. Brain
Wellness Webinar, KSU. October 22.
- 2021 The Science of Happiness. Girl Scouts Troop 90611. February 18.
- 2022 Mindful Teaching for Meaningful Learning. Kent State University Center for
Teaching and Learning Workshop. November 9.

TEACHING EXPERIENCE

- Laboratory: Problems in Human Evolution (undergraduate)
- Introduction to Human Evolution (undergraduate)
- Quantitative Anthropology (undergraduate)

- Brains, Hormones, and Behavior (undergraduate and graduate)
- Human Biological Variation (undergraduate and graduate)
- Human Musculoskeletal System (undergraduate and graduate)
- Principles of Biological Anthropology (graduate)
- Koru – meditation and mindfulness for college aged students

STUDENTS

PHD STUDENTS - SCHOOL OF BIOMEDICAL SCIENCES

Heather Smith	TBD	in progress
Danielle Jones	A comparative analysis of monoamine oxidase enzymes and cannabinoid receptor 1 among primates	2023
Emily Munger	Alteration to astrocyte density and morphology across Mammalia with specific attention to primate brain evolution and aging	2020
Melissa Edler	Chimpanzees shed light on Alzheimer's disease pathology in humans	2016
Aidan Ruth	co-Advisor with Owen Lovejoy, KSU Anthropology Comparative anatomy of the anterior cruciate ligament and its associated structure in primates: A study of body size, bundle number and bipedality.	2017

MA STUDENTS – DEPARTMENT OF ANTHROPOLOGY

Hannah Maycon	TBD	
Roxanne Steinmuller	Neuron and glial density changes across the lifespan in humans and chimpanzees	2021
Emma Janosik	Does early manipulation of oxytocin influence serotonin innervation within the hippocampus?	2020
Kristen Hirter	Neurochemical insights of human origins: A comparative analysis of dopaminergic axon innervation of the ventral striatum among primates.	2019

Stacy Leigh Deraway	Dopaminergic patterns of innervation in the thalamus: Informing the evolution of human language	2018
Danielle Jones	Neuroanatomical and genetic correlates of aggression among macaque species	2018
Rachel Hamilla	Orangutan health and behavior: Implications for nutrition in captivity	2018
Emily Munger	Phenotypic pattern of astrocyte activation in response to aging and Alzheimer's-like pathology in chimpanzees	2016
Alexa Stephenson	Acetylcholine in the basal ganglia	2015
Amy Dupper	Altered cortical calbindin-immunoreactive interneuron populations associated with schizophrenia	2013
Mitch Sumner	Cross-species comparisons of the retrosplenial cortex: through time and neuropil space	2013
Eric Henthorn	The association of serum biomarkers with cardiac health in captive gorillas	2010
Christopher Bonadio	Evolutionary origins of obsessive compulsive disorder and depression	2008

UNDERGRADUATE HONOR'S STUDENTS

Torrance Gaskins	Cannabinoid receptor type 1 (CB1) densities in monogamous and non-monogamous New World monkeys	2022
Sierra Duncan	A case study on the behavioral effects of cabergoline on a female western lowland gorilla (<i>Gorilla gorilla gorilla</i>)	2022
LaKalea Wilson	A comparative neuroanatomical study on the metabolic components of executive versus motor regions of the basal ganglia	2015

DISSERTATION AND THESIS COMMITTEE MEMBERSHIP

Katherine Hicks	Undergraduate honor's thesis committee, KSU Anthropology
Mackenzie Shindorf	Undergraduate honor's thesis committee, KSU Biology
Ashley Choe	Undergraduate honor's thesis committee, University of Akron
Sarah Nock	Undergraduate honor's thesis committee, KSU Biology
Emily Brahler	Undergraduate honor's thesis committee, KSU Anthropology

Kassandra Frey	Undergraduate honor's thesis committee, KSU Anthropology
Samantha Kirgesner	Undergraduate honor's thesis committee, KSU Anthropology
Claire Thiele	Undergraduate honor's thesis committee, KSU Biology
Dhruv Ramesh Nakhwa	Undergraduate honor's thesis committee, KSU Biology
Aidan Ruth	Master's thesis committee, KSU Anthropology
Cathleen Pyrek	Master's thesis committee, KSU Anthropology
Alana Muhlberger	Master's thesis committee, KSU Anthropology
Michael Veres	Master's thesis committee, KSU Anthropology
Jennifer Kreierhoff	Master's thesis committee, KSU Anthropology
Arioene Vreedzaam	Master's thesis committee, KSU Anthropology
Dexter Zirkle	Master's thesis committee, KSU Anthropology
Andrew Skrinyer	Master's thesis committee, KSU Anthropology
Heather Lawrentz	Master's thesis committee, KSU Anthropology
Robert M. Hamilton	Master's non-thesis option committee, KSU Anthropology
Cody Ruiz	Master's thesis committee, KSU Anthropology
Jessica Sudduth	Master's non-thesis option committee, KSU Anthropology
Gina Cherundolo	Master's thesis committee, KSU Anthropology
Melia Romine	Master's thesis committee, KSU Anthropology
Ashley Rutkoski	Master's thesis committee, KSU Anthropology
Sarah Nock	Master's thesis committee, KSU Anthropology
Heather Smith	Master's thesis committee, KSU Anthropology
Megan Muniak	Master's thesis committee, KSU Anthropology
Steven Sizemore	Doctoral dissertation committee, KSU BMS
Elena Hoellein Less	Doctoral dissertation committee, Case Western Reserve Biology
Grace Fuller	Doctoral dissertation committee, Case Western Reserve Biology
Amber Chenoweth	Doctoral dissertation committee, KSU Psychology
Gagandeep Kaur	Doctoral dissertation committee, KSU Biology
Andrea Musial	Doctoral dissertation, graduate faculty rep KSU Biology
Meghan Moran	Doctoral dissertation, graduate faculty representative NEOMED
Kari Hanson	Doctoral dissertation committee, UCSD Anthropology
Aidan Ruth	Doctoral dissertation committee, KSU BMS
Jessica Murphy Krizo	Doctoral dissertation committee, KSU BMS
Loral Elizabeth Showalter	Doctoral dissertation, graduate faculty representative KSU BMS
Megan Hendrickson Vignos	Doctoral dissertation committee, KSU BMS
Shannah Witchey	Doctoral dissertation committee, KSU Biology
Shane Bemiller	Doctoral dissertation, graduate faculty representative KSU BMS
Gina Wilson	Doctoral dissertation committee, KSU BMS
Jennifer Sensor	Doctoral dissertation, graduate faculty representative NEOMED
Maeson Latsko	Doctoral dissertation, grad faculty representative KSU Psychology
Aminu Imam	Doctoral dissertation, external reviewer, School of Anatomical Sciences, University of the Witwatersrand, Johannesburg, South Africa
Kholoud Alkhayer	Doctoral dissertation committee, KSU Biology
Michelle Bebbler	Doctoral dissertation committee, KSU BMS
Megan Linscott	Doctoral dissertation, graduate faculty representative KSU BMS

Victoria Williams	Doctoral dissertation, external reviewer, School of Anatomical Sciences, University of the Witwatersrand, Johannesburg, South Africa
Kaylin Tennant	Doctoral dissertation committee, Case Western Reserve Biology
Thomas O'Rourke	Doctoral dissertation committee, alternate, University of Barcelona, Spain
Rachel Corrigan	Doctoral dissertation committee, KSU Biology
Victoria Sanborn	Doctoral dissertation, graduate faculty representative KSU Psychology
Dexter Zirkle	Doctoral dissertation committee, KSU BMS
Rose Leach	Doctoral dissertation committee, KSU BMS
Kerianne Armelli	Doctoral dissertation committee, KSU BMS
Heather Lawrentz	Doctoral dissertation committee, KSU BMS
Ian Farnkopf	Doctoral dissertation committee, KSU BMS
Emilee Hart	Doctoral dissertation committee, KSU BMS
Christina Watts	Doctoral dissertation, graduate faculty representative KSU Biology
Katlynd Reese	Doctoral dissertation committee, KSU Biology
Samantha Magrini	Doctoral dissertation committee, KSU BMS
Elaine Miller	Doctoral dissertation committee, The George Washington University Anthropology

MENTOR FOR NOA-AGEP STUDENTS

2018-2021	Christina Watts
2018-2021	Cody Ruiz

OTHER STUDENTS MENTORED IN THE LABORATORY

Kay-Lee Cangelosi	High School Student (one semester research experience)
Kendall Syms	High School Student (shadow day)
Emma Coley	High School Student (shadow day)
Brianna Bish	High School Student (one semester research experience)
Kiya Walker	High School Student (shadow day)
Megan Larkin	High School Student (Senior project)
Tiffini Conley	Undergraduate, KSU
Sam Watson	Undergraduate, KSU
Laura Roche	Undergraduate, University of Akron
Ashley Koenig	Undergraduate, University of Akron
William Matthews Ruff	Undergraduate, McNair Scholar, KSU
Ashley Golphin	Undergraduate, McNair Scholar, KSU
Shunya Yagi	Undergraduate, KSU
Brianne Rowles	Undergraduate, KSU
Genevieve Sharron	Undergraduate, KSU

Emily Munger	Undergraduate, KSU
James Moore	Undergraduate, KSU
Kristen Hirter	Undergraduate, KSU
Mike Esekwen	Undergraduate, KSU
Demetra Rahmon	Undergraduate, McNair Scholar, KSU
Claire Thiele	Undergraduate, KSU
Jenna Atkinson	Undergraduate, KSU
Kaitlyn Baker	Undergraduate, McNair Scholar, KSU
Hayley Groetz	Undergraduate, KSU
Torrance Gaskins	Undergraduate, KSU
Daniel Doucette	Undergraduate, KSU
Noah Nicholson	Undergraduate, KSU
 Matt Hudnall	 Post-graduate
 Zach Thomas	 MA student, KSU Anthropology
Tatiana Bohush	MA student, KSU Anthropology
Jessica Sudduth	MA student, KSU Anthropology
Angelia Werner	MA student, KSU Anthropology
Nicole Perrone	MA student, KSU Anthropology
 Valerie Gilbert	 PhD student, KSU BMS
Travis Miller	PhD student, KSU BMS
Jennifer Sensor	PhD student, NEOMED
Rose Leach	PhD student, KSU BMS
Kerianne Armelli	PhD student, KSU BMS

UNIVERSITY & PROFESSIONAL SERVICE, CITIZENSHIP & AWARDS

2023	Chair, Director of Wick Poetry Center Performance Review Committee, KSU
2021	Elected Fellow, American Association for the Advancement of Science
2020-present	Joint Appeals Board, administrative appointee, KSU
2020-present	Neuroscience Curriculum Committee, KSU
2020	Elected Full Member, Sigma Xi
2019-present	Faculty Advisor for Anthropology Student Organization (ASO)
2019-present	Koru Mindfulness and Meditation certified teacher, KSU
2014-present	Council Member (elected) Northeast Ohio Society for Neuroscience
2014-present	Faculty Academic Advisor for undergraduate Anthropology students

2007-present	Institutional Animal Care and Use Committee (IACUC)
2022	Upward Bound – June 30
2022	The Science of Mindfulness and Meditation: An Invitation to the Practice, KSU Sociology – October 19
2021	Upward Bound – July 9
2019-2022	Brain Health Research Institute Executive Committee, KSU
2021	Search Committee for the Associate Provost for Academic Affairs and Dean of the Division of Graduate Studies, Kent State University
2020-2021	Research Continuity Taskforce in response to COVID-19, KSU
2020-2021	KSU Quality of Faculty Work/Life Committee, administration representative
2020	Ig Nobel Prize
2020	Nominated for KSU Outstanding Research and Scholarship Award, KSU
2019-2021	Symposium Committee, Brain Health research Institute, KSU
2019-20	Dean Performance Review Committee, KSU
2019	Upward Bound Day- Anthropology
2018	Kent State University Assessment Pioneer Award
2018	Nominated for KSU Outstanding Research and Scholarship Award
2018	KSU Quality of Faculty Work/Life Committee, administration representative
2014-2015	RPT committee, Department of Biostatistics, Environmental Health Sciences, and Epidemiology, College of Public Health, Kent State University
2008-2015	Laboratory Safety and Radiation Safety Committees Department of Research and Graduate Studies, Office of Research Safety and Compliance
2015-2016	Research Advisory Council, Kent State University
2014-2015	University Council on Technology
2013-2014	Instructor participant for Upward Bound “Anthropology Day”

2008-2014	BS/MD admissions committee, bi-annually
2015, 2016, 2017	Judge for KSU Undergraduate Research Symposium
2015	Judge for KSU Graduate Research Symposium
2011	Committee to establish Arts and Sciences Faculty Mentoring Program
2009-2010	Nominated for the Arts and Sciences Distinguished Teacher Award
2010	University Research Council screening committee, College of the Arts
2008-2009	Nominated for the Arts and Sciences Distinguished Teacher Award
2007-present	Various commencement, convocation, and recruitment events

AD HOC REVIEWER OF RESEARCH ARTICLES

American Journal of Primatology
 Annals of the New York Academy of Sciences
 Behavioral and Brain Sciences
 Brain Research
 Brain Structure & Function
 Cerebral Cortex
 Experimental Brain Research
 Frontiers in Human Neuroscience
 Frontiers in Neuroscience
 Hormones and Behavior
 Journal of Anatomy
 Journal of Chemical Neuroanatomy
 Journal of Comparative Neurology
 Journal of Human Evolution
 Journal of Neuroscience Methods
 Nature
 Neurobiology of Aging
 Neuropeptides
 Neuroscience
 Neuroscience Letters
 Proceedings of the National Academy of Sciences
 Psychoneuroendocrinology
 Science
 Scientific Reports
 Trends in Cognitive Sciences

AD HOC GRANT REVIEWER

American Zoo and Aquarium Association
The Leakey Foundation
National Institutes of Health
National Science Foundation
Wenner Gren

STUDENT HONORS AND AWARDS

Danielle Jones University Fellowship, Kent State University 2022-2023

Danielle Jones The Mary Ann Stephens and John R. Graham Award, Kent State University, 2021

Danielle Jones Stem Advocacy Institute Fellowship, 2020

Danielle Jones Award for virtual presentation, Allied Genetics Conference (TAGC) 2020
Monoamine oxidase polymorphisms in Japanese and rhesus macaques (Macaca fuscata and M. mulatta).

Kristen Hirter Outstanding Presentation award, 2019 KSU Graduate Research Symposium
Neurochemical insights of human origins: A comparative analysis of dopaminergic innervation of the ventral striatum among primates.

Danielle Jones Outstanding Presentation award, 2017 KSU Graduate Research Symposium
The evolution of aggression: Insights from a macaque model of MAOA polymorphism.

Alexa Stephenson Outstanding Presentation award, 2015 KSU Graduate Research Symposium
A comparative study of the cholinergic innervation of the basal ganglia among human and nonhuman primate species.

LaKalea Wilson Outstanding Presentation award, 2014 KSU Undergraduate Research Symposium
A comparative neuroanatomical study of the metabolic components of executive versus motor regions of the Basal Ganglia.

Amy Dupper Outstanding Presentation award, 2013 KSU Graduate Research Symposium
Altered cortical calbindin-immunoreactive neuron populations associated with schizophrenia.

PUBLIC UNDERSTANDING OF SCIENCE

SELECTED NEWS STORIES COVERING RESEARCH IN:

News Break (6-26-21), Discover Magazine (4-23-20), Science Alert (9-18-19), Live Science (9-16-19), Daily Mail (9-13-19), Macon Telegraph (9-12-19), The Scientist (9-1-19), Science Daily (6-26-19), Phys.org (6-26-19), Le Scienze (6-6-19), The Atlantic (3-5-18), United Press International (UPI) (2-9-

18), *Paperblog* (2-11-18), *Breitbart News Network* (2-9-18), *HealthDesk* (in Italy, 2-6-18), *Genetic Literacy Project* (1-30-18), *Science Alert* (1-27-18), *Descopera* (in Romania, 1-25-18), *Scientific American* (1-24-18), *Le Scienze* (in Italy, 1-24-18), *Science and Life* (in Russia, 1-24-18), *KopalniaWiedzy* (in Poland, 1-24-18), *Phys.Org* (1-23-18), *N + 1* (in Spanish, 1-23-18), *Wissenschaft aktuell* (in Germany, 1-23-18), *Science Magazine* (1-22-18), *Naked Science* (in Russia, 1-22-18), *Technology Networks* (12-1-17), *Eureka Alert* (11-30-17), *Technology Networks* (11-27-17), *Psychology Today* (blog) (11-24-17), *National Science Foundation* – press release (8-18-17), *Eureka Alert* (8-7-17), *Science Post* (in France, 8-3-17), *Dan Tri* (in Vietnam, 8-3-17), *Smithsonian Magazine* (8-2-17), *Index* (in Hungary 8-1-17), *Nature* (8-1-17), *New Scientist* (8-1-17), *Science Magazine* (8-1-17), *Independent* (in the UK, 8-1-17), *The Sun* (in the UK, 8-1-17), *Daily Mail* (in the UK, 8-1-17), *News-Medical.net* (8-1-17), *ScienceNet* (in China, 8-1-17), *Gizmodo* (in Spanish, 8-1-17), *ICI.Radio* (in Canada, 8-1-17), *RIA Science* (in Russia, 8-1-17), *Science Magazine* (7-31-17), *Ohio State News* (6-22-15)

INTERVIEWED FOR NEWS STORIES PUBLISHED IN:

KentWired (3-9-21), *Akron Beacon Journal* (4-15-17), *Fresh Water Cleveland* (9-14-16), *New York Times* (2-12-15), *Science* (2-19-15), *Kent Stater* (2-23-15), *Science News* (2-26-15)

RESEARCH AND INTERVIEW FEATURED IN: *Today's Science*, *Science News* Written Especially for Students, <https://www.infobase.com/product/schools/todays-science-online/> (2018)

PODCAST COVERING RESEARCH FOR: *Exploradio: NPR – KSU* (2-19-18)