

Katherine Ryan Amato
1810 Hinman Ave • Evanston, IL 60208 • 847-467-5890
katherine.amato@northwestern.edu • www.kramato.com

1. Academic Degrees

| | |
|---|-------------|
| Doctor of Philosophy, Ecology, Evolution and Conservation Biology University of Illinois, Urbana-Champaign | August 2013 |
| Bachelor of Arts <i>summa cum laude</i> , General Biology with high honors Dartmouth College | June 2007 |

2. Relevant Research Positions

| | |
|---|---|
| Assistant Professor, Department of Anthropology <i>Northwestern University</i> | September 2015 - present Evanston, IL |
| Postdoctoral Research Associate <i>University of Colorado Boulder</i> | September 2013 - 2015 Boulder, CO |
| National Science Foundation Graduate Research Fellow Illinois Distinguished Fellowship <i>University of Illinois, Urbana-Champaign</i> | September 2010-2013 August 2008-2010 Urbana-Champaign, IL |
| Fulbright Fellow/Young Explorer <i>Institute for International Education/National Geographic</i> | September 2007-May 2008 Los Tuxtlas, Veracruz, Mexico |
| Behavioral Research Intern <i>Lester E. Fisher Center for the Study and Conservation of Apes</i> <i>Regenstein Center for African Apes</i> <i>Lincoln Park Zoo</i> | 2004-2006 Chicago, IL |
| Honors Student | 2006-2007 |
| Presidential Scholar | 2005-2006 |
| Crute Fellow | 2004-2005 |
| Women in Science Program Intern <i>Dartmouth College</i> | 2003-2004 Hanover, NH |

3. Research Grants

| | |
|--|-----------|
| Manulife CIFAR Population Health & Well-being Grant | 2020 |
| NSF (DEB - PCE) EAGER Award | 2020 |
| CIFAR Catalyst Grant | 2019 |
| Leakey Foundation Research Grant (co-PI) | 2018 |
| Wenner-Gren Post-doctoral Award | 2017 |
| Northwestern University Weinberg College Research Innovation Grant | 2017 |
| CIFAR Azrieli Global Scholarship | 2016-2018 |
| Nacey Maggioncalda Foundation | 2015 |
| University of Illinois Isabel Norton Award | 2012 |
| National Geographic Waitt Grant | 2010-2011 |
| University of IL Dissertation Travel Grant | 2011 |
| University of IL PEEC Summer Research Grant | 2009 |
| University of IL Tinker Summer Research Grant | 2009 |
| University of IL Beckman Institute Grant | 2009 |
| National Geographic Young Explorers Grant (Conservation Trust) | 2007-2008 |
| Fulbright Garcia-Robles Fellowship | 2007-2008 |

Dartmouth College Reynolds Fellowship 2007-2008

4. Additional Honors and Awards

CIFAR Fellow (Humans and the Microbiome) 2019
Finalist, Anthropology Graduate Student Association Mentorship Award, Northwestern University 2019, 2020
Karl Rosengren Faculty Mentoring Award, Northwestern University 2019
Azrieli Global Scholar (Humans and the Microbiome), Canadian Institute for Advanced Research 2016-2018
Invited Speaker, Early Career Scientists Symposium, University of Michigan March 2015
TEDxJackson Hole Presenter October 2014
First Place, Student Paper Competition, Congress of the International Primatological Society 2012
Best Student Presentation, American Society of Primatologists Annual Meeting 2011
Best Talk by Pre-Prelim Ph.D. Student, Grad. Students in Ecology & Evolutionary Biology, UIUC 2010
Member, Phi Kappa Phi 2010-2013
Ray W. Smith Award, Dartmouth College 2007
Christopher G. Reed Biologist Award, Dartmouth College 2007
Florence Fletcher Charles Botany Prize, Dartmouth College 2007
Member, Phi Beta Kappa 2007-present
Associate Member, Sigma Xi 2007-present
2nd Place, Christopher Reed Science Competition, Dartmouth College May 2007
Richter Memorial Grant, Dartmouth College 2006-2007
Honors Second Group, Dartmouth College 2004-2007
Member, National Society of Collegiate Scholars 2004

5. Additional Activities

Resilient Chicago Data Science Networking Group co-Leader, Northwestern University 2019-2020
President, Midwest Primate Interest Group 2017-present
Associate Editor, *Microbiome* (Impact Factor: 10.903) 2016-present
Member, International Society of Primatology Research Committee 2019-2020
Guest Editor, Microbiome Special Issue, American Journal of Primatology 2018
Program Committee, International Society for Evolutionary Medicine and Public Health 2018
Symposium Coordinator, Graduate Students in Ecology and Evolutionary Biology, UIUC 2011-2012
Outreach Coordinator, Graduate Students in Ecology and Evolutionary Biology, UIUC 2009-2010
Dartmouth Class of 2007 Newsletter Editor 2007-2017

6. Additional Skills

Fluent in Spanish
CIFAR Azrieli Global Scholars Leadership and Mentorship Training May 2017, May 2018
Northwestern Faculty Workshop for Research Mentors March 2017
Certified SCUBA Open Water Diver, PADI September 2005
Wilderness Risk Management Training, Dartmouth College April 2004
Group Dynamics Training, Dartmouth College April 2004

7. Memberships

American Society for Microbiology
American Society of Primatologists
American Association of Physical Anthropologists
International Primatological Society
International Society for Microbial Ecology
International Society for Evolutionary Medicine and Public Health

8. Peer Review Roles

Journals include: American Journal of Physical Anthropology, American Journal of Primatology, Applied and Environmental Microbiology, Biological Conservation, Conservation Physiology, Current Biology, Ecology and the Natural Environment, Environmental Microbiology and Environmental Microbiology Reports, FEMS Microbiology, Frontiers in Ecology and Evolution, Frontiers in Microbiology, Integrative and Comparative Biology, International Journal of Primatology, International Journal of Tropical Biology, ISME J, Mammal Review, Microbiology,

Microbiome, Molecular Ecology, mBio, mSystems, Nature Human Behavior, Nutrition and Metabolism, Oecologia, PeerJ, PLoS One, PNAS, Primates, Royal Society Open Science, Science, Science Advances, Scientific Reports

Organizations include: Czech Science Foundation, European Research Council, ETH Zurich Research Council, Fulbright Foundation, German Academic Exchange Service (DAAD), Graduate Women in Science, Institut Pasteur, Israel Science Foundation, Leakey Foundation, National Science Foundation, University of Nebraska Food for Health Collaboration Initiative, Wellcome Trust/DBT India Alliance

9. Publications

† indicates a student or postdoc in my lab

2020

Mallott, E.K.† and **K.R. Amato**. (in press) Phylosymbiosis, diet, and gut microbiome associated metabolic disease. *Evolution, Medicine, and Public Health*.

Amato, K.R., S. Kuthyar†, M. Ekanayake-Weber, R. Salmi, N. Snyder-Mackler, L. Wijayathunga, R. Vandercone, A. Lu. (in press) Gut Microbiome, Diet, and Conservation of Endangered Langurs in Sri Lanka. *Biotropica*

Mallott, E.K. †, C. Borries, A. Koenig, **K.R. Amato**, A. Lu. (2020) Reproductive hormones mediate changes in the gut microbiome during pregnancy and lactation in Phayre's leaf monkeys. *Scientific Reports*, 10: 9961.

Song, S.J., J.G. Sanders, F. Delsuc, J.L. Metcalf, **K.R. Amato**, M.W. Taylor, F. Mazel, H.L. Lutz, K. Winker, G.R. Graves, G. Humphrey, J.A. Gilbert, S.J. Hackett, K.P. White, H.R. Skeen, S.M. Kurtis, J. Withrow, T. Braile, M. Miller, K. G. McCracken, J.M. Maley, V.O. Ezenwa, A. Williams, J.M. Blanton, V.J. McKenzie, R. Knight 2020. Comparative Analyses of Vertebrate Gut Microbiomes Reveal Convergence between Birds and Bats. *mBio*. 11(1).

Dunn, R.R., **K.R. Amato**, E. Archie, M. Arandjelovic, A.N. Crittenden, L.M. Nichols. (2020) The internal, external, and extended microbiomes of hominins. *Frontiers in Ecology and Evolution*. 8: 25.

Mann, A.E., F. Mazel, M.A. Lemay, E. Morien, V. Billy, M. Kowalewski, A. Di Fiore, A. Link, T.L. Goldberg, S. Tecot, A.L. Baden, A. Gomez, M.L. Sauter, F.P. Cuzzo, G.A.O. Britton, N.J. Dominy, R.M. Stumpf, R.J. Lewis, L. Swedell, **K.R. Amato**, L.W. Parfrey. (2020) Biodiversity of protists and nematodes in the wild non-human primate gut. *ISME Journal* 14: 609-622

2019

Gupta, A., D. Dhakan, A. Maji, R. Saxena, P.K. Vishnu, S. Mahajan, J. Pulikkan, J. Kurian, A. Gomez, J. Scaria, **K.R. Amato**, A. Sharma, V. Sharma (2019) Association of *Flavonifractor plautii*, a flavonoid degrading bacterium, with the gut microbiome of colorectal cancer patients in India. *mSystems*. 4(6): e00438-19.

Amato, K.R. and Stumpf, R.M. (2019) Moving forward with the primate microbiome: Introduction to a special issue of the *American Journal of Primatology*. *American Journal of Primatology*. 81(10-11): e23060

Frankel, J.S. †, Mallott, E.K. †, Hopper, L.M., Ross, S.R., **Amato, K.R.** (2019) The effect of captivity on the primate gut microbiome varies with host dietary niche. *American Journal of Primatology*. 81(12): e23061.

Kuthyar, S. †, M. Manus†, **K.R. Amato**. (2019) Leveraging non-human primates for exploring the social transmission of microbes. *Current Opinion in Microbiology*. 50: 8-14.

Amato, K.R., E.K. Mallott†, D. McDonald, N.J. Dominy, T. Goldberg, J.E. Lambert, L. Swedell, J.L. Metcalf, A. Gomez, G.A.O. Britton, R.M. Stumpf, S.R. Leigh, R. Knight. (2019). Convergence of human and Old World monkey gut microbiomes demonstrates the importance of human ecology over phylogeny. *Genome Biology*. 20(1): 201-213.

- Mallott, E.K. †, R.S. Malhi, **K.R. Amato**. (2019) Assessing the comparability of different DNA extraction and amplification methods in gut microbial community profiling. *Access Microbiology*. 1(7): e000060.
- Hale V.L., C.L. Tan, K. Niu, Y. Yang, Q. Zhang, R. Knight, **K.R. Amato**. (2019) Gut microbiota in wild and captive Guizhou snub-nosed monkeys, *Rhinopithecus brelichi*. *American Journal of Primatology*. 81(10-11): e22989.
- Maurice, C., **K.R. Amato**, J. Zylberberg, G. Schlau-Cohen. (2019) Some simple policy changes to support scientist-parents. *University Affairs*. <https://www.universityaffairs.ca/opinion/in-my-opinion/some-simple-policy-changes-to-support-scientist-parents/>
- Amato, K.R.**, T. Jeyakumar, H. Poinar, P. Gros. (2019) Shifting climates, shifting foods, shifting diseases: Microbial perspectives on human evolution. *Bioessays*. 41(10): 1900034.
- Amato, K.R.**, C.F. Maurice, K. Guillemin, T. Giles-Vernick. (2019) Multi-disciplinary in microbiome research: A challenge and opportunity to rethink causation, variability, and scale. *BioEssays*. 41(10): 1900007.
- Gomez, A., A.K. Sharma, E.K. Mallott†, K.J. Petrzekova, C.A. Jost Robinson, C.J. Yeoman, F. Carbonero, B. Pafco, J.M. Rothman, A. Ulanov, K. Vlckova, **K.R. Amato**, S.L. Schnorr, N.J. Dominy, D. Modry, A. Todd, M. Torralba, K.E. Nelson, M.B. Burns, R. Blekhman, M. Remis, R.M. Stumpf, B.A. Wilson, H.R. Gaskins, P.A. Garber, B.A. White, S.R. Leigh. (2019) Plasticity in the human gut microbiome defies evolutionary constraints. *mSphere*. 4: e00271-19.
- Amato, K.R.** (2019). Missing links: The role of primates in understanding the human microbiome. *mSystems*. 4: ee00165-19.
- Dhakan, D.B., A. Maji, A.K. Sharma, R. Saxena, J. Pulikkan, T. Grace, A. Gomez, J. Scaria, **K.R. Amato**, V.K. Sharma. (2019) The unique composition of Indian gut microbiome, gene catalogue, and associated faecal metabolome deciphered using multi-omics approaches. *GigaScience*. 8(3). doi: 10.1093/gigascience/giz004
- Amato, K.R.**, J. Sanders, S.J. Song, M. Nute, J. Metcalf, L.R. Thompson, J.T. Morton, A. Amir, V. McKenzie, G. Humphrey, G. Gogul, J. Gaffney, A. Baden, G. Britton, F. Cuzzo, A. Di Fiore, N. Dominy, T. Goldberg, A. Gomez, M.M. Kowalewski, R. Lewis, A. Link, M. Sauter, S. Tecot, B. White, K. Nelson, R. Stumpf, R. Knight, S. Leigh. (2019) Evolutionary trends in host physiology outweigh diet in structuring primate gut microbiomes. *ISME Journal*. 13(3): 576-587.
- 2018
- E.K. Mallott†, **K.R. Amato** (2018) The microbial reproductive ecology of white-faced capuchins (*Cebus capucinus*). *American Journal of Primatology*. 165(3):576-588.
- J. Clayton, A. Gomez, **K.R. Amato**, D. Knights, D.A. Travis, R. Blekman, R. Knight, S.R. Leigh, R. Stumpf, T. Wolf, K.E. Glander, F. Cabana, and T.J. Johnson (2018) The Gut Microbiome of Nonhuman Primates: Lessons in Ecology and Evolution. *American Journal of Primatology*. 80(6): e22867
- E.K. Mallott†, **K.R. Amato**, P.A. Garber, R.S. Malhi. (2018) Influence of fruit and invertebrate consumption on the gut microbiota of white-faced capuchins (*Cebus capucinus*). *American Journal of Physical Anthropology*. 165(3): 576-588.
- Raulo, A., L. Ruokolainen, A. Lane, **K.R. Amato**, R. Knight, S. Leigh, R. Stumpf, B. White, K. Nelson, A. Baden, S. Tecot. (2018) Social behavior and gut microbiota in red-bellied lemurs (*Eulemur rubriventer*): In search of the role of immunity in the evolution of sociality. *Journal of Animal Ecology*. 87: 388-399. Doi: 10.1111/1365-2656.12781
- 2017
- Davenport, E.R., J.G. Sanders, S.J. Song, **K.R. Amato**, A.G. Clark, R. Knight. (2017) The human microbiome in evolution. *BMC Biology*. 15:127.

- Righini, N. and **Amato, K.R.** (2017) Platyrrhine Diet. In Encyclopedia of Animal Cognition and Behavior. J. Vonk and T. Schackelford, eds. Springer.
- McKenzie, V.J., S.J. Song, F. Delsuc, T.L. Prest, A.M. Oliverio, T.M. Korpita, A. Alexiev, **K.R. Amato**, J.L. Metcalf, M. Kowalewski, N.L. Avenant, A. Link, A. Di Fiore, A. Segui-Orlando, C. Feh, L. Orlando, J.R. Mendelson, J. Sanders, R. Knight. (2017) The effects of captivity on the mammalian gut microbiome. *Integrative and Comparative Biology*. 57(4): 690-704.
- Hale, V.R., C.L. Tan, K. Niu, Y. Yang, R. Knight, Q. Zhang, D. Cui, **K.R. Amato** (2017) Diet versus phylogeny: A comparison of gut microbiota in captive colobine monkey species. *Microbial Ecology*. 10.1007/s00248-017-1041-8
- Springer, A., C. Fichtel, G.A. Al-Ghalith, F. Koch, **K.R. Amato**, J.B. Clayton, D. Knights, P.M. Kappeler. (2017) Patterns of seasonality and group membership characterize the gut microbiota in a longitudinal study of wild Verreaux's sifakas (*Propithecus verreauxi*). *Ecology and Evolution*. 10.1002/ece3.3148
- Amato, K.R.** (2017) Diets and Nutrition. In International Encyclopedia of Primatology. A. Fuentes, ed. Wiley-Blackwell.
- Amato K.R.**, S. Van Belle, A. Di Fiore, A. Estrada, R.M. Stumpf, B. White, K.E. Nelson, R. Knight, S.R. Leigh (2017). Patterns in gut microbiota similarity associated with degree of sociality among sex classes of a Neotropical primate. *Microbial Ecology*. 74(1): 250-258. doi:10.1007/s00248-017-0938-6
- Amato, K.R.**, A. Ulanov, K.S. Ju, P.A. Garber. (2017) Metabolomic data suggest regulation of black howler monkey (*Alouatta pigra*) diet composition at the molecular level. *American Journal of Primatology*. 79(4): 1-10.
- Estrada, A., P.A. Garber, A.B. Rylands, C. Roos, E. Fernandez-Duque, A. Di Fiore, K.A. Isola Nekaris, V. Nijman, E.W. Heymann, J.E. Lambert, F. Rovero, C. Barelli, J.M. Setchell, T.R. Gillespie, R.A. Mittermeier, L.V. Arregoitia, M. de Guinea, S. Gouveia, R. Dobrovolski, S. Shanee, N. Shanee, S.A. Boyle, A. Fuentes, K.C. MacKinnon, **K.R. Amato**, A.L.S. Meyer, S. Wich, R.W. Sussman, R. Pan, I. Kone, B. Li. (2017). Impending extinction crisis of the world's primates: why primates matter. *Science Advances*. 3(1): e1600946.
- Amato, K.R.** (2017). An Introduction to Microbiome Analysis for Human Biology Applications. *American Journal of Human Biology*. 29(1): e22931. Doi: 10.1002/ajhb.22931
- 2016
- Hale, V.L., C.L. Tan, K. Niu, Y. Yan, D. Cui, H. Zhao, R. Knight, and **K.R. Amato**. (2016) Effects of field conditions on fecal microbiota. *Journal of Microbiological Methods*.
- Amato, K.R.**, J.L. Metcalf, S.J. Song, V.L. Hale, J. Clayton, G. Ackermann, G. Humphrey, K. Niu, D. Cui, H. Zhao, M.D. Schrenzel, C. Tan, R. Knight, J. Braun. (2016). Using the gut microbiota as a novel tool for examining colobine primate GI health. *Global Ecology and Conservation*. 7: 225-237.
- Stumpf, R.M., A. Gomez, **K.R. Amato**, C.J. Yeoman, J.D. Polk, B.A. Wilson, K.E. Nelson, B.A. White, S.R. Leigh. (2016) Microbiomes, metagenomics, and primate conservation: New strategies, tools, and applications. *Biological Conservation*. 199:56-66.
- Bennett G., M. Malone, M.L. Sauther, F.P. Cuzzo, B. White, K.E. Nelson, R.M. Stumpf, R. Knight, S.R. Leigh, **K.R. Amato**. (2016) Host age, social group and habitat type influence the gut microbiota of wild, ring-tailed lemurs (*Lemur catta*). *American Journal of Primatology*. 78(8): 883-892. Doi: 10.1002/ajp.22555

Song, S.J. A. Amir, J.L. Metcalf, **K.R. Amato**, Z.Z. Xu, G. Humphrey, R. Knight. (2016) Preservation methods differ in fecal microbiome stability, affecting suitability for field studies. *mSystems*. 1(3) doi: 10.1128/mSystems.00021-16

Gomez, A., Petrzalkova, K.J., Burns, M.B., Yeoman, C.J., **Amato, K.R.**, Vlckova, K., Modry, D., Todd, A., Jost Robinson, C.A., Remins, M.J., Torralba, M.G., Morton, E., Umana, J.D., Carbonero, F., Gaskins, H.R., Nelson, K.E., Wilson, B.A., Stumpf, R.M., White, B.A., Leigh, S.R., Blekman, R. (2016) Gut microbiome of coexisting BaAka pygmies and Bantu reflects gradients of traditional subsistence patterns. *Cell*. doi: <http://dx.doi.org/10.1016/j.celrep.2016.02.013>

Amato, K.R. (2016) Incorporating the gut microbiota into models of human and non-human primate ecology and evolution. *Yearbook of Physical Anthropology*. 159: 196-215. DOI: 10.1002/ajpa.22908

Amato, K.R., R. Martinez-Mota, N. Righini, M. Raguette-Schofield, F.P. Corcione, E. Marini, G. Humphrey, G. Gogul, J. Gaffney⁷, E. Lovelace, L. Williams, A. Luong, M.G. Dominguez-Bello, R.M. Stumpf, B. White, K. Nelson, R. Knight, S.R. Leigh (2016). Phylogenetic and ecological factors impact the gut microbiota of two Neotropical primate species. *Oecologia*. 180(3): 717-733. doi: 10.1007/s00442-015-3507-z

Amato, K.R., C. J. Yeoman, C. Schmitt, G. Cerda, J.D. Cramer, M.E. Berg Miller, A. Gomez, T. Turner, B.A. Wilson, R. M. Stumpf, K.E. Nelson, B.A. White, R. Knight, S.R. Leigh. (2015). Variable responses of human and non-human primate gut microbiota to a Western diet. *Microbiome*. 3(53).

2015

Hale, V., C.L. Tan, R. Knight, **K.R. Amato**. (2015). Effect of preservation method on spider monkey (*Ateles geoffroyi*) fecal microbiota over 8 weeks. *Journal of Microbiological Methods*. 113: 16-26. doi:10.1016/j.mimet.2015.03.021

Amato, K.R., S.R. Leigh, A.D. Kent, R. Mackie, C.J. Yeoman, R.M. Stumpf, B. A. Wilson, K.E. Nelson, B.A. White, P.A. Garber. (2015). The gut microbiota appears to compensate for seasonal diet variation in the wild black howler monkey. (*Alouatta pigra*). *Microbial Ecology*. 69(2): 434-443.

Amato, K.R. and N. Righini. (2015). The howler monkey as a model for exploring host-gut microbiota interactions in primates. In: M. Kowalewski, P.A. Garber, L. Cortés-Ortiz, B. Urbani, and D. Youlatos, eds. *Howler Monkeys: Adaptive radiation, systematics and morphology*. Springer, New York. 229-258.

2014

Amato, K.R., S.R. Leigh, A.D. Kent, R. Mackie, C.J. Yeoman, R.M. Stumpf, B.A. Wilson, K.E. Nelson, B.A. White, P.A. Garber. (2014). The role of gut microbes in satisfying the demands of adult and juvenile wild, black howler monkeys (*Alouatta pigra*). *American Journal of Physical Anthropology*. 155(4): 652-664. DOI: 10.1002/ajpa.22621

Amato, K.R. and P.A. Garber. (2014). Nutrition and foraging strategies of the black howler monkey (*Alouatta pigra*) in Palenque National Park, Mexico. *American Journal of Primatology*. 76(8): 774-787. doi: 10.1002/ajp.22268

2013

Amato, K.R. (2013). Co-evolution in context: The importance of studying gut microbiomes in wild animals. *Microbiome Science and Medicine*. 1:10-29. doi: 10.2478/micsm-2013-0002.

Amato, K.R., S. Van Belle, B. Wilkinson. (2013). A comparison of scan and focal sampling for the description of wild primate activity, diet, and intragroup spatial relationships. *Folia Primatologica*. 84: 87-101.

Amato, K.R., C.J. Yeoman, A. Kent, N. Righini, F. Carbonero, A. Estrada, H.R. Gaskins, R. Stumpf, S. Yildirim, M. Torralba, M. Gillis, B. Wilson, K. Nelson, B. White, S.R. Leigh. (2013). Habitat degradation impacts black howler monkey (*Alouatta pigra*) gastrointestinal microbes. *The ISME Journal*. 7: 1344-1353. doi:10.1038/ismej.2013.16.

2012

Amato, K.R., B. Martin, A. Pope, C. Theiling, K. Landwehr, J. Petersen, B. Ickes, J. Houser, Y. Yin, B. Hannon, R. Sparks. (2012). Spatially explicit modeling of productivity in Pool 5 of the Mississippi River. In: J. Westervelt and G. Cohen, editors. *Ecologist-Developed Spatially-Explicit Dynamic Landscape Models*. Springer, New York: 151-170.

2011

Nakamura, N., **Amato, K.R.**, Estrada, A.E., Garber, P.A., Mackie, R.I., and Gaskins, H.R. (2011). Analysis of the hydrogenotrophic microbiota of wild and captive howler monkeys (*Alouatta pigra*). *American Journal of Primatology*. 73: 909-919.

2010

Amato, K.R. and A.E. Estrada. (2010). Seed dispersal patterns in two closely related howler monkey species (*Alouatta palliata* and *A. pigra*): A preliminary report of differences in fruit consumption, traveling behavior, and associated dung beetle assemblages. *Neotropical Primates*. 17(2): 59-66.

2008

Amato, K.R., S.L. Emel, C.A. Lindgren, K.M. Sullan, P.R. Wright and J.J. Gilbert. (2008). Covering behavior of two co-occurring sea urchins in Discovery Bay, Jamaica: Differences in amount of covering and selection of covering material. *Bulletin of Marine Science*. 82(2): 255-261.

2006

Amato, K.R., D.D. Onen, S.L. Emel, and C.H. May. (2006). Comparison of foraging behavior between howler monkeys, spider monkeys, and squirrel monkeys. *Dartmouth Undergraduate Journal of Science*. 9:1, 28-31.

10. Invited Presentations and Seminars

2020

Speaker, 2nd Annual Microbiome Meeting at Cold Spring Harbor Laboratories. Cold Spring Harbor Laboratories, NY.

**virtual due to COVID-19

Symposium speaker at ISME 18, Cape Town, South Africa.

**declined due to conflicting seminar

Plenary Speaker, Comparative Nutrition Society 2020. Salt Lake City, UT.

**virtual due to COVID-19

Symposium speaker at the Joint Meeting of the International Primatological Society and SLAPrim. Quito, Ecuador.

** postponed due to COVID-19

Symposium speaker at the Joint Meeting of the International Primatological Society and SLAPrim. Quito, Ecuador.

** postponed due to COVID-19

Participant, Faculty Roundtable on Intellectual Humility: Exploring the Mysteries of Existence, from Microbes to the Cosmos, The Veritas Forum

Speaker, Fermentology Mini-Seminars, North Carolina State, Department of Applied Ecology

**virtual due to COVID-19

Speaker, Summer Journal Club on Anthropological Genetics, University of Utah, Department of Anthropology

**virtual due to COVID-19

Track Hub Speaker, ASM Microbe 2020. Chicago, IL.
**postponed due to COVID-19

Speaker, 40th Blankenese Conference on Evolutionary Medicine. Hamburg, Germany.
**postponed due to COVID-19

Seminar at Clemson University, Department of Biological Sciences

Seminar at Yale University, Department of Anthropology

Guest lectures in Primate Behavior and Evolutionary Medicine at Dartmouth College, Department of Anthropology

2019

Seminar at 3rd Lembersky Conference in Human Evolutionary Studies: Advances in Primate Nutritional Ecology, Health, and Energetics, Rutgers University

Contributor, 'Cultures of Fermentation', Wenner-Gren Foundation Symposium. Sintra, Portugal.

Speaker, 'Beyond the standard: Non-model vertebrates in biomedicine'. EMBO Workshop, Berlin, Germany.

Speaker, 'Microbiome Madness', University of Minnesota, Microbe and Plant Genetics Institute.

Symposium Chair and Speaker, 'The Primate Microbiome', Annual Meeting of the American Society of Primatology. Madison, WI.

Speaker, Annual Sociality and Health in Primates (SoHaPi) group meeting. Gottingen, Germany.

Speaker, 3rd Annual Animal-Microbe Symbioses Gordon Research Conference, Mount Snow, VT.

Symposium presentation at the 88th Annual Meeting of the American Association of Physical Anthropologists. Cleveland, OH.

Keynote speaker, 4th Annual MIT-Harvard Microbiome Symposium. Boston, MA.

Speaker, 1st Annual CMI International Microbiome Meeting. San Diego, CA.

Invited contributor, 'Irreversible Species Interactions', Santa Fe Institute on Ecological Evolution. Santa Fe, NM.
**declined due to previous NSF grant review commitment

2018

Seminar at Feinberg School of Medicine, Northwestern University.

Seminar at Lincoln Park Zoo, Chicago.

Seminar at Loyola University, Department of Biology.

Seminar at the University of Arizona, School of Anthropology.

Virtual seminar at the Universidad Veracruzana, Xalapa, Veracruz, Mexico.

Symposium presentation at the 4th Annual Meeting of the International Society of Evolutionary Medicine and Public Health. Park City, UT, USA.

Seminar at M.D. Anderson Center for Comparative Medicine, Bastrop, TX.

Panelist in 'Interdisciplinary Approach', Network for Advancing and Evaluating the Societal Impact of Science Impact of Science Conference. Ottawa, Ontario, Canada.

Seminar in 'Evolution and Social Science' Colloquium at the University of Missouri, Department of Anthropology.

Seminar at the University of Oregon, Department of Biology, Department of Anthropology.

2017

Seminar at the University of Notre Dame, Department of Biological Sciences.

Seminar at Benedictine University, Department of Biology.

Seminar at Duke University, Department of Evolutionary Anthropology.

Seminar at East Carolina University, Department of Biology.

Seminar for The Center on Social Disparities and Health at the Institute for Policy Research (Cells to Society), Northwestern University.

Speaker, American Society of Microbiology Microbe Conference. New Orleans, LA, USA.

Symposium presentation at the 86th Annual Meeting of the American Association of Physical Anthropologists. New Orleans, LA, USA.

Speaker, Early Life Determinants of Later Life Health and Well-being: The Microbiome and Epigenetics as Biological Mechanisms conference. Madison, WI, USA.

Speaker, Computational Research Day, Northwestern University.

Speaker, Conference on Gut and Intestinal Function. Chicago, IL, USA.

2016

Symposium presentation at the joint meeting of the International Primatological Society and the American Society of Primatologists. Chicago, IL, USA.

Seminar at the Lincoln Park Zoo, Chicago.

Speaker, 2nd Annual Meeting of the International Society for Evolution, Medicine, and Public Health. Durham, NC, USA.

Speaker, Office of Research Development, Northwestern University.

Seminar at University of New Mexico, Department of Biology.

Seminar at University of Illinois at Urbana-Champaign, Department of Anthropology.

Speaker, AT&T High Technology Day. Co-sponsored by National Geographic. Chicago, IL, USA.

2015

Seminar at Indiana University, Center for the Integrative Study of Animal Behavior.

Speaker, Early Career Scientists Symposium, University of Michigan.

Seminar at University of California Davis, Department of Neurobiology, Physiology, and Behavior.

Seminar at University of Connecticut, Department of Molecular and Cell Biology.

Seminar at University of Texas San Antonio, Department of Anthropology.

Seminar at Northwestern University, Department of Anthropology.

2014

Speaker, TEDx Jackson Hole.

Seminar at Harvard University, Department of Human Evolutionary Biology.

2013

Seminar at Stony Brook University, Department of Anthropology.

2009

Speaker, National Geographic Live! Washington, D.C.

Speaker, National Geographic Young Explorers Workshop, National Geographic Headquarters, Washington, D.C.

Speaker, National Geographic Young Explorers Workshop, Harvard University, Boston, MA.

2008

Speaker, National Geographic Young Explorers Workshop, University of Washington, Seattle, WA.

11. Other Presentations and Seminars

(these do not include presentations given by mentees or collaborators; only those that I personally have given)

Mallott, E.K. and K.R. Amato (2020) Workshop on *Gut microbiome data analysis*. of the International Primatological Society and SLAPrim. Quito, Ecuador.
**postponed one year due to COVID-19

Amato, K.R., S. Kuthyar, P. Pradhan, D. Carba, J. Borja, T.W. McDade, C.W. Kuzawa. (2019). Early life environments predict gut microbiome composition of adult women in Cebu, Philippines. Poster at the 89th Annual Meeting of the American Association of Physical Anthropologists. Cleveland, OH, USA. (in symposium 'Life History and the Gut Microbiome co-chaired by K.R. Amato and A. Lu)
**Cancelled due to COVID-19

Leigh, S.R., D. McDonald, N.J. Dominy, T. Goldberg, J.E. Lambert, L. Swedell, J.L. Metcalf, A. Gomez, G.A.O. Britton, R.M. Stumpf, R. Knight, E.K. Mallott, K.R. Amato. (2019). High Variability and decoupling from phylogenetic effects characterize the human microbiome. Talk at the 88th Annual Meeting of the American Association of Physical Anthropologists. Cleveland, OH, USA.

Amato, K.R., N. Righini, E.K. Mallott, R. Martinez-Mota. (2018) Interactions between bacteria and parasites in the GI tract of wild black howler monkeys (*Alouatta pigra*). Talk at the 87th Annual Meeting of the American Association of Physical Anthropologists. Austin, TX, USA.

Amato, K.R., J. Sanders, S.J. Song, M. Nute, J.L. Metcalf, L.R. Thompson, J.T. Morton, A. Amir, V. McKenzie, G. Humphrey, G. Gogul, J. Gaffney, A. Baden, G. Britton, F. Cuozzo, A. Di Fiore, N. Dominy, T. Goldberg, A. Gomez, M. Kowalewski, R. Lewis, A. Link, M. Sauter, S. Tecot, B.A. White, K. Nelson, R. Stumpf, R. Knight, S.R. Leigh. (2017). Host physiology limits gut microbiota convergence in response to diet specialization. Poster at Gordon Research Conference on Host-Microbe Interactions. Mount Snow, VT, USA.

Amato, K.R., S. Van Belle, A. Di Fiore, A. Estrada, R. Stumpf, B. White, K.E. Nelson, R. Knight, S.R. Leigh. (2016) The impact of kinship and social contact on the gut microbiota of wild, black howler monkeys

- (*Alouatta pigra*). Poster at the 85th Annual Meeting of the American Association of Physical Anthropologists. Atlanta, GA, USA.
- Amato, K.R. (2016) Gut Check: What's all the hype about the human microbiome? Community presentation at the Skokie Public Library. Skokie, IL, USA.
- Amato, K.R., M. Raguet-Schofield, N. Righini, R. Martinez-Mota, R. Knight, R. Stumpf, K.E. Nelson, B.A. White, S.R. Leigh. (2015). Determinants of the gut microbiota of Mesoamerican howler monkeys (*Alouatta pigra* and *A. palliata*). Poster at the 84th Annual Meeting of the American Association of Physical Anthropologists. St. Louis, MO, USA.
- Amato, K.R., C.J. Yeoman, G. Cerda, C. Schmitt, J.D. Cramer, M.E. Berg-Miller, A. Gomez, T. Turner, B.A. Wilson, R. M. Stumpf, K.E. Nelson, B.A. White, R. Knight, S.R. Leigh. (2015). The human and non-human primate gut microbiota react differently to a Western diet. Poster at the Keystone Symposium on Molecular and Cellular Biology: Gut microbiota modulation of host physiology: The search for mechanism. Keystone, CO.
- Amato, K.R., K.S. Ju, A. Ulanov, P.A. Garber. (2014). Black howler monkeys (*Alouatta pigra*) at Palenque National Park, Mexico target lipid metabolites when foraging. Invited symposium presentation at the 37th Annual Meeting of the American Society of Primatologists. Decatur, GA.
- Amato, K.R., M. Kowalewski, A. Di Fiore, A. Link, S. Cassalet, R.M. Stumpf, K.E. Nelson, B.A. White, R. Knight, S.R. Leigh. (2014). Diet or phylogeny?: The gut microbiota of leaf-eating primates. Poster at the 15th International Symposium on Microbial Ecology. Seoul, Korea.
- Amato, K.R., S.R. Leigh, M. Kowalewski, R.M. Stumpf, K.E. Nelson, B.A. White, R. Knight. (2014). The gut microbiota of leaf-eating primates: Implications for ecology and evolution. Presentation at the 25th Congress of the International Primatological Society. Hanoi, Vietnam.
- Amato, K.R. and P.A. Garber. (2014). An ateline foraging strategy: Nutritional intake of the black howler monkey (*Alouatta pigra*) in Palenque National Park, Mexico. Presentation at the 83rd Annual Meeting of the American Association of Physical Anthropologists. Calgary, Alberta, Canada.
- Leigh, S.R., K.R. Amato, A.D. Kent, C.J. Yeoman, M. Torralba, M. Gillis, B.A. Wilson, K.E. Nelson, A. Gomez, B.A. White, R.M. Stumpf. (2014). Comparative perspectives on primate microbiomes. Presentation at the 83rd Annual Meeting of the American Association of Physical Anthropologists. Calgary, Alberta, Canada.
- Amato, K.R., C.J. Yeoman, G. Cerda, A. Jasinska, J.D. Cramer, M.E. Berg-Miller, A. Gomez, M. Torralba, M. Gillis, T. Turner, B.A. Wilson, R. M. Stumpf, K.E. Nelson, B.A. White, S.R. Leigh. (2014). Host phylogeny and diet impact human and non-human primate gut microbiota. Poster at the Keystone Symposium on Molecular and Cellular Biology: Exploiting and Understanding Chemical Biotransformations in the Human Microbiome. Big Sky, MT.
- Amato, K.R., S.R. Leigh, A. Kent, C.J. Yeoman, A. Estrada, R.M. Stumpf, M. Torralba, M. Gillus, B.A. Wilson, K.E. Nelson, B. White, P.A. Garber. (2013). Age and sex differences in the behavior, diet, and gut microbial communities of wild black howler monkeys (*Alouatta pigra*). Presentation at the 82nd Annual Meeting of the American Association of Physical Anthropologists. Knoxville, TN.
- Amato, K.R. and P.A. Garber. (2012). Behavioral strategies for meeting nutritional demands across seasons and life history stages in the Mexican black howler monkey (*Alouatta pigra*). Presentation at the Midwest Primate Interest Group Meeting. Northern Illinois University, DeKalb, IL.
- Amato, K.R., C.J. Yeoman, N. Righini, A. Kent, F. Carbonero, A. Estrada, H.R. Gaskins, R.M. Stumpf, S. Yildirim, K.E. Nelson, M. Torralba, M. Gillus, S.R. Leigh. (2012). Spatial and temporal patterns in Mexican black

howler (*Alouatta pigra*) gut microbial community composition. Presentation at the 24th Congress of the International Primatological Society. Cancun, Mexico.

Amato, K.R., C.J. Yeoman, N. Righini, A. Kent, F. Carbonero, A. Estrada, H.R. Gaskins, R.M. Stumpf, S. Yildirim, K.E. Nelson, M. Torralba, M. Gillus, S.R. Leigh. (2012). Spatial and temporal variation in the gut microbiome of wild, black howler monkeys (*Alouatta pigra*). Presentation at the 97th Annual Meeting of the Ecological Society of America. Portland, OR.

Amato, K.R., C.J. Yeoman, N. Righini, A. Kent, A. Estrada, R.M. Stumpf, K.E. Nelson, M. Torralba, M. Gillus, S.R. Leigh. (2011). The influence of habitat on Mexican black howler (*Alouatta pigra*) gut microbial community composition. Presentation at the 34th Meeting of the American Society of Primatologists. Austin, TX.

Amato, K.R., C.J. Yeoman, N. Righini, A. Kent, A. Estrada, D. Munoz, R.M. Stumpf, B. White, K.E. Nelson, M. Torralba, M. Gillus, S.R. Leigh. (2011). Gastrointestinal microbial community composition and habitat structure in howler monkeys (*Alouatta pigra*). Presentation at the 80th Annual Meeting of the American Association of Physical Primatologists. Minneapolis, Minnesota.

Amato, K.R. (2011) La ecología y la nutrición del mono aullador negro en el Parque Nacional Palenque. Presentation to the Comisión Nacional de Áreas Naturales Protegidas. Palenque National Park, Chiapas, Mexico.

Amato, K.R., A.D. Kent, R.I. Mackie, A. Estrada, P.A. Garber. (2010). The gut microbes and foraging behavior of wild, black howler monkeys (*Alouatta pigra*) in Palenque National Park, Mexico. Poster at 13th International Symposium on Microbial Ecology, Seattle, Washington.

Amato, K., B. Martin, A. Pope, B. Hannon, C. Theiling, B. Ickes, J. Houser, R. Sparks (2009). Spatially Explicit carbon Cycling in the Mississippi River. Poster at ERDC Conference, Memphis, Tennessee.

Amato, K.R. (2009). Age and sex-based differences in the foraging behavior of black howler monkeys (*Alouatta pigra*) in Palenque National Park, Mexico. Presentation at the Midwest Primate Interest Group Meeting. Grand Valley State University, Allendale, MI.

Amato, K.R., Estrada, A.E. (2009). A preliminary comparison of seed dispersal in two howler monkey species (*Alouatta palliata* and *Alouatta pigra*). Poster at Planet U Conference, University of Illinois, Champaign-Urbana, IL.

Amato, K.R., Estrada, A.E. (2008). A preliminary comparison of seed dispersal in two howler monkey species (*Alouatta palliata* and *Alouatta pigra*). Poster at the Midwest Primate Interest Group Meeting, University of Notre Dame, South Bend, IN.

12. Workshops

Mallott, E.K.* and **K.R. Amato**. (2020). GUT MICROBIOME DATA ANALYSIS. Workshop at the Joint Meeting of the International Primatological Society and SLAPrim. Quito, Ecuador.

** postponed due to COVID-19

13. Students

Graduate - Primary Advisor

Melissa Manus

Paula Maia

Tabor Whitney

Kim McCabe (co-advised with Thom McDade)

Graduate - Committee Member

Alyssa Bader (University of Illinois at Urbana-Champaign, 2019)
Julianna Perez (Northwestern University)
Lotte Jensen (McGill University)
Carson Black (Central Washington University)

Undergraduate

Jeffrey Frankel
Tara Mittelberg
Nicolette McManus
Imogene Asa
Peter Finnegan
Ella Rubenstein
Wesley Shirola
Madelyn Moy
Soumya Jhaveri

Other

Brandy Parker (Intern)
Yan Zeng (Visiting student from Sichuan Agricultural University, China)
Priyanka Pradhan (Feinberg School of Medicine, Northwestern University)
Amelia Baldwin (Intern from Oakton Community College)
Brian Cho (Intern from Oakton Community College)
Lauren Kane (Public Health Program, Feinberg School of Medicine, Northwestern University)