

RACHEL NAOMI CARMODY

Department of Human Evolutionary Biology
Harvard University
11 Divinity Avenue
Cambridge, MA 02138 USA

MCZ 542 (office) / Peabody 56C (lab)
Phone: +1 617 495 0846
carmody@fas.harvard.edu
www.nme.fas.harvard.edu

POSITIONS

Assistant Professor	Department of Human Evolutionary Biology Harvard University (2021-2022 is Year 3 on tenure-clock)	2016 – present
Postdoctoral Fellow	G.W. Hooper Research Foundation University of California, San Francisco (UCSF)	2014 – 2016
	FAS Center for Systems Biology Harvard University	2012 – 2014
Project Manager	Oliver Wyman (Management Consulting)	1999 – 2005

EDUCATION

Postdoctoral	UCSF, G.W. Hooper Research Foundation (2014-2016) Harvard University, FAS Center for Systems Biology (2012-2014) Advisor: Peter Turnbaugh
Ph.D. 2012	Harvard University, Department of Human Evolutionary Biology Thesis: “Energetic consequences of thermal and non-thermal food processing” Advisor: Richard Wrangham
A.B. 1999, <i>magna cum laude</i>	Harvard University, Department of Anthropology Highest honors in field of concentration, language citation (French)

GRANTS & FELLOWSHIPS

CURRENT

NSF BCS-1919892, Biological Anthropology (PI) “Impacts of dietary fat type on energy gain in the human holobiont” (Co-PI: Chadaideh)	2019 – 2021
Harvard Dean’s Competitive Fund for Promising Scholarship (PI) “Assessing functional uniqueness in the human microbiome”	2019 – 2022

COMPLETED

NIH R01AG049395, NIA/ORWH (Co-PI) “Biodemography of aging in wild chimpanzees” (PI: Emery Thompson)	2015 – 2021
William F. Milton Fund (PI) “Dietary manipulation of the gut microbiome”	2018 – 2020
Harvard Dean’s Competitive Fund for Promising Scholarship (PI) “Human milk modulates gut microbial contributions to infant energy acquisition”	2018 – 2021
“Gut microbial plasticity in animal domestication”	2017 – 2020
“The caloric potential of non-caloric dietary additives”	2016 – 2019

GRANTS & FELLOWSHIPS, COMPLETED (CONTINUED)

Harvard T.H. Chan School of Public Health, Acceleration Award (Co-PI) “Limiting dietary protein improves markers of healthspan” (PI: Mitchell)	2018 – 2020
NIH Ruth L. Kirschstein National Research Service Award, 1F32DK101154 “Gut microbial promotion of energy gain from processed diets”	2013 – 2016
Eliot Dissertation Completion Fellowship	2011 – 2012
Merit Research Fellowship	2010
NSF Doctoral Dissertation Improvement Grant, BCS-0962038	2010
Leakey Foundation Research Grant	2010
NSF Graduate Research Fellowship	2007 – 2010
Harvard Graduate Society Research Fellowship	2006
Harvard University Graduate Prize Fellowship	2005 – 2010

AWARDS

Outstanding Abstract Award, American Society for Microbiology	2019
Best Poster, Boston Bacterial Meeting	2014
NIDDK/NIA Scholarship for Keystone Symposia (5R13DK084688-05)	2014
Harvard University Certificate of Teaching Excellence	2011
Harvard University Certificate of Distinction in Undergraduate Teaching	2006, 2007
Thomas Temple Hoopes Prize for Excellence in Scholarly Research	1999
W.W. Howells Prize for Excellence in Anthropological Research	1999

PUBLICATIONS

* denotes service as senior and/or corresponding author
= denotes equal contributions as first author

JOURNAL ARTICLES

- Chadaideh KS, **Carmody RN***. 2021. Host-microbial interactions in the metabolism of different dietary fats. *Cell Metabolism* 33: 857-872.
- Carmody RN***, Sarkar A, Reese AT. 2021. Gut microbiota through an evolutionary lens: why reversing some changes in the industrialized gut microbiota may be risky for health. *Science* 372: 462-463.
- Reese AT, Chadaideh KS, Diggins CE, Schell LD, Beckel M, Callahan P, Ryan R, Emery Thompson M, **Carmody RN***. 2021. Effects of domestication on the gut microbiota parallel those of human industrialization. *eLife* 2021: 10:e60197.
- Reese AT, Phillips-Garcia S, Owens LA, Venable EM, Machanda ZP, Langergraber KE, Mitani JC, Watts DP, Muller MN, Wrangham RW, Goldberg TL, Emery Thompson M, **Carmody RN***. 2020. Age patterning in the wild chimpanzee gut microbiota reveals differences from humans in early life. *Current Biology* 31: 613-620.
- Sarkar A, Harty S, Johnson KVA, Moeller AH, Archie EA, Schell LD, **Carmody RN**, Clutton-Brock TH, Dunbar RIM, Burnet PWJ. 2020. Microbial transmission in animal social networks and the social microbiome. *Nature Ecology & Evolution* 4: 1020-1035.

PUBLICATIONS, JOURNAL ARTICLES (CONTINUED)

- Sarkar A, Harty S, Johnson KVA, Moeller AH, **Carmody RN**, Lehto SM, Erdman SE, Dunbar RIM, Burnet PWJ. 2020. The role of the microbiome in the neurobiology of social behaviour. *Biological Reviews* 95: 1131-1166.
- Carmody RN***, Bisanz JE, Maurice CF, Lyalina S, Bowen BJ, Chadaideh K, Maini Rekda V, Bess EN, Spanogiannopoulos P, Bauer KC, Balon TW, Pollard KS, Northen TR, Turnbaugh PJ. 2019. Cooking shapes the structure and function of the gut microbiome. *Nature Microbiology* 4: 2052-2063.
- Wallace IJ, Bendele AM, Riew G, Hung HH, Frank EH, Holowka NB, Bolze AS, Venable EM, Yegian A, Dingwall HL, **Carmody RN**, Grodzinsky AJ, Lieberman DE. 2019. Physical inactivity and knee osteoarthritis in guinea pigs. *Osteoarthritis and Cartilage* 27: 1721-1728.
- Carmody RN***, Baggish AL. 2019. Working out the bugs: microbial modulation of athletic performance. *Nature Metabolism* 1: 658-659.
- Kip P, Trocha KM, Tao M, O'Leary JJ, Ruske J, Giulietti JM, Trevino-Villareal JH, MacArthur MR, Bolze A, Burak MF, Patterson S, Ho KJ, **Carmody RN**, Guzman RJ, Mitchell JR, Ozaki CK. 2019. Insights from a short-term protein-caloric restriction exploratory trial in elective carotid endarterectomy patients. *Vascular and Endovascular Surgery* 53: 470-476.
- Reese AT, **Carmody RN**. 2018. Thinking outside the cereal box: non-carbohydrate routes for dietary manipulation of the gut microbiota. *Applied and Environmental Microbiology* 85: e02246-18.
- Zhang L, **Carmody RN**, Kalariya H, Duran RM, Moskal K, Poulev A, Kuhn P, Turnbaugh PJ, Raskin I, Roopchand DE. 2018. Grape proanthocyanidin-induced intestinal bloom of *Akkermansia muciniphila* is dependent on its baseline abundance and precedes activation of host genes related to metabolic health. *Journal of Nutritional Biochemistry* 56: 142-151.
- Carmody RN**⁺, Dannemann M⁺, Briggs AW, Nickel B, Groopman EE, Wrangham RW, Kelso J. 2016. Genetic evidence of human adaptation to a cooked diet. *Genome Biology and Evolution* 8: 1091-1103.
- Spanogiannopoulos P, Bess EN, **Carmody RN**, Turnbaugh PJ. 2016. The microbial pharmacists within us: a metagenomic view of xenobiotic metabolism. *Nature Reviews Microbiology* 14: 273-287.
- Roopchand DE, **Carmody RN**, Kuhn P, Moskal K, Rojas-Silva P, Turnbaugh PJ, Raskin I. 2015. Dietary polyphenols promote growth of the gut bacterium *Akkermansia muciniphila* and attenuate high fat diet-induced metabolic syndrome. *Diabetes* 64: 2847-2858.
- Smith A, **Carmody RN**, Dutton RJ, Wrangham RW. 2015. The significance of cooking for early hominin scavenging. *Journal of Human Evolution* 84: 62-70.
- Carmody RN**⁺, Gerber G⁺, Luevano JM, Gatti DM, Somes L, Svenson KL, Turnbaugh PJ. 2015. Diet dominates host genotype in shaping the murine gut microbiota. *Cell Host & Microbe* 17: 72-84. [COVER ARTICLE]
- Groopman EE, **Carmody RN**, Wrangham RW. 2015. Cooking increases net energy gain from a lipid-rich food. *American Journal of Physical Anthropology* 156: 11-18. [COVER ARTICLE]
- Carmody RN**, Turnbaugh PJ. 2014. Host-microbial interactions in the metabolism of therapeutic and diet-derived xenobiotics. *Journal of Clinical Investigation* 124: 4173-4181. [COVER ARTICLE]
- David LA, Maurice CF, **Carmody RN**, Gootenberg DB, Button JE, Wolfe BE, Ling AV, Devlin AS, Varma Y, Fischbach MA, Biddinger SB, Dutton RJ, Turnbaugh PJ. 2014. Diet rapidly and reproducibly alters the human gut microbiome. *Nature* 505: 559-563.
- Carmody RN**, Turnbaugh PJ. 2012. Gut microbes make for fattier fish. *Cell Host & Microbe* 12: 259-261.
- Carmody RN***, Weintraub GS, Wrangham RW. 2012. Reply to Wollstonecroft et al.: Cooking increases the bioavailability of starch from diverse plant sources. *Proceedings of the National Academy of Sciences USA* 109: E992.

PUBLICATIONS, JOURNAL ARTICLES (CONTINUED)

- Carmody RN***, Weintraub GS, Wrangham RW. 2011. Energetic consequences of thermal and nonthermal food processing. *Proceedings of the National Academy of Sciences USA* 108: 19199-19203.
- Wrangham R, **Carmody R***. 2010. Human adaptation to the control of fire. *Evol Anthropol* 19: 187-199.
- Carmody RN**, Wrangham RW. 2009. Cooking and the human commitment to a high-quality diet. *Cold Spring Harbor Symposia on Quantitative Biology* 74: 427-434.
- Carmody RN**, Wrangham RW. 2009. The energetic significance of cooking. *J Hum Evol* 57: 379-391.
- Boback SM, Cox CL, Ott BD, **Carmody R**, Wrangham RW, Secor SM. 2007. Cooking and grinding reduces the cost of meat digestion. *Comparative Biochemistry and Physiology A* 148: 651-656.

FORTHCOMING PUBLICATIONS

- Sarkar A, Harty S, Moeller AH, Klein SL, Erdman SE, Friston KJ, **Carmody RN***. In revision. The gut microbiome as a biomarker of differential susceptibility to SARS-CoV-2.
- Ma S, Ren B, Mallick H, Moon YS, Schwager E, Maharjan S, Tickle TL, Lu Y, **Carmody RN**, Franzosa EA, Janson L, Huttenhower C. In review. A statistical model for describing and simulating microbial community profiles. (available at bioRxiv, <https://doi.org/10.1101/2021.03.26.437146>)
- Ke S, Mitchell SJ, MacArthur MR, Kane AE, Sinclair DA, Venable EM, Chadaideh KS, **Carmody RN**, Grodstein F, Mitchell JR, Liu YY. Submitted. Gut microbiota predicts healthy late-life aging in male mice. (available at bioRxiv, <https://www.biorxiv.org/content/10.1101/2021.06.22.449472>)
- MacArthur MR, Mitchell SJ, Chadaideh KS, Treviño-Villareal JH, Reynolds J, Jung J, Kalafut K, Trocha K, Tao M, Yeliseyev V, Bry L, Ozaki CK, Lewis CA, **Carmody RN**, Mitchell JR. Submitted. Multi-omics assessment of dietary amino acid titration reveals altered hepatic glucose utilization.
- Chadaideh KS, Eappen K, Moore B, **Carmody RN***. Submitted. Polyphenols from berries, wine and coffee consumed at routine levels shape the gut microbiota, energy balance, and inflammation.
- Parkent C, Worthington S, **Carmody RN**, Devinsky O, Lieberman DE. In prep. Variation in hunter-gatherer diets compared to the Paleo Diet.
- Schell LD, **Carmody RN***. In prep. The primate gut microbiome: leveraging insights to understand human-microbiome interactions.
- Schell LD, Diggins CE, Chadaideh KS, Yeliseyev V, Bry L, **Carmody RN***. In prep. Disentangling phylogenetic, physiological, and environmental influences on the human microbiome.
- Bolze AS, Venable EM, Louis MP, Carlson BA, Garland T, **Carmody RN***. In prep. Increased energy expenditure mediates shifts in the gut microbiota that modulate host energy homeostasis.
- Reese AT, Reiter T, Kuntz TM, Chadaideh KS, Yeliseyev V, Bry L, Wilkinson J, Huttenhower C, **Carmody RN***. In prep. Domestication and diet interact to shape gut microbiome function and its contributions to host metabolism and immune function.
- Schell LD, **Carmody RN***. In prep. Industrial and traditional dietary preservatives alter the structure and function of the murine gut microbiome.
- Sarkar A, Stothart MR, Raulo A, **Carmody RN***. In prep. Hosts as islands: how island biogeography theory illuminates and obscures patterns in host microbiome and microbial ecology.

BOOK CHAPTERS / EDITED VOLUMES

- Carmody RN***. 2017. Evolution of the human dietary niche – quest for high-quality. In Muller MN, Wrangham RW and Pilbeam DR (eds.), *Chimpanzees & Human Evolution* (pp. 311-338). Cambridge, MA: Harvard University Press.
- Wrangham RW, **Carmody RN**. 2016. Influences of the control of fire on the energy value and composition of the human diet. In Lee-Thorp J and Katzenberg MA (eds.), *The Oxford Handbook of the Archaeology of Diet*. Oxford: Oxford University Press.
- Carmody RN***. 2015. Digestion and human evolution. In Beaudry MC and Metheny K (eds.), *Archaeology of Food: An Encyclopedia* (pp. 136-138). Lanham, MD: Rowman & Littlefield.

INVITED TALKS

- U.S. Congressional Briefing on NIH Funding for Microbiome Research: “Energetic buffering by the gut microbiome.” July 28, 2021.
- Tufts University, Biology Seminar Series: “Alternative energy: gut microbial buffering of energy balance.” March 31, 2021.
- CIFAR Annual Symposium, Humans and the Microbiome: “Ecological plasticity of the gut microbiome: a double-edged sword.” March 26, 2021.
- National Academies of Science, Distinctive Voices Lecture Series: “Challenging cooked calorie counts considering chemistry, co-inhabitants, and consequences for public health.” March 10, 2021.
- University of California Santa Barbara, Broom Demography Center: “Ecological sensitivity of the gut microbiome.” February 22, 2021.
- ILSI North America 2020, Advances in Gut Microbiome Research: “Cooking shapes the structure and function of the gut microbiome.” July 22, 2020.
- Harvard T.H. Chan Center for the Microbiome in Public Health, Symposium on Human Microbiome Bioactives: “Energetic buffering by the gut microbiome,” May 8, 2020.
- American Museum of Natural History, SciCafe & Teen SciCafe: “The raw truth about cooking.” March 6 & 7, 2019.
- Tufts University, Friedman School of Nutrition Science & Policy, Invited Seminar: “Counting calories considering our co-residents: toward a holobiont view of energy acquisition.” November 19, 2018.
- DSM Microbia, Nutritional Products Engineering, Invited Seminar: “Dietary manipulation of the gut microbiome.” June 28, 2018.
- Johns Hopkins School of Medicine, Symposium on Microbiome, Obesity, and IBD: “Dietary manipulation of the gut microbiome.” June 25, 2018.
- Collège de France, Paris Symposium on Energetics of Hominins: “Partners in chyme: hominin-microbial interactions in energy acquisition.” June 12, 2018.
- American Society for Nutrition, Annual Meeting: “Counting calories considering our co-residents: toward a holobiont view of energy acquisition.” June 9, 2018.
- Brigham Research Institute, 7th Annual Obesity Incubator Symposium, Plenary Lecture: “Dietary sensitivity of the gut microbiome: considerations for metabolic disease.” March 26, 2018.
- Purdue University, Ingestive Behavior Research Center Biennial Conference, Plenary Lecture: “Evolution of the human dietary niche.” October 2, 2017.
- Harvard Microbial Sciences Initiative (MSI) Annual Symposium: “Partners in chyme: dietary manipulation of the gut microbiome.” April 15, 2017.

INVITED TALKS (CONTINUED)

- McGill University, Department of Microbiology and Immunology: “Food and its form: diet-based manipulation of the gut microbiome.” April 6, 2017.
- MIT-Harvard Microbiome Symposium, Keynote Lecture: “Dietary manipulation of the gut microbiome.” March 22, 2017.
- New York Academy of Sciences, Microbial Influences in Cardio-Metabolic Diseases, Plenary Lecture: “Cooking shapes the structure and function of the gut microbiome.” November 3, 2016.
- Duke University, Department of Evolutionary Anthropology Colloquium Lecture: “Partners in chyme: human-microbial interactions shape energy gain from processed diets.” April 1, 2016.
- California Academy of Sciences, Leakey Foundation Lecture: “Cooking for calories: food processing and the shape of human energy gain.” December 8, 2015.
- Harvard T.H. Chan School of Public Health, Nutrition Seminar Series: “Diet rapidly and reproducibly reshapes the gut microbiome.” April 20, 2015.
- American Gastroenterological Association, Digestive Diseases Week: “Gut microbial promotion of energy gain from processed diets.” May 5, 2014.
- Harvard University, Department of Human Evolutionary Biology Colloquium Lecture: “Partners in chyme: promotion of human energy gain by the dynamic gut microbiota.” March 12, 2014.
- Emmanuel College, Microbiology Seminar Series: “Diet causes rapid and reproducible shifts in the human gut microbiome.” February 10, 2014.
- University of Massachusetts, Boston, Department of Anthropology: “Digestion and indigestion: the contributions of food processing to human energy gain and their depictions in the popular press.” September 30, 2013.
- Max Planck Institute for Evolutionary Anthropology, Leipzig, Germany: “Contributions of food processing to past and present human energy budgets.” December 14, 2012.
- Rutgers, The State University of New Jersey, Anthropology Lecture Series: “Energetic consequences of cooking: implications for human nutrition in the past and present.” March 1, 2012.
- Albert Einstein College of Medicine, Department of Epidemiology & Population Health Seminar Series: “Underestimating the caloric consequences of cooking.” September 15, 2011.

CONFERENCE PROCEEDINGS

- Chadaideh KS, **Carmody RN**. April 21, 2021. Fats are differentially fattening: Host-microbial interactions in energy harvest from dietary lipids. American Association of Physical Anthropologists (AAPA), Baltimore, MD (presented online due to COVID-19).
- Venable EM, Bolze AS, Carlson BA, **Carmody RN**. April 21, 2021. High energy expenditure causes shifts in the gut microbiota that buffer host energy balance. AAPA, Baltimore, MD (presented online due to COVID-19).
- Carmody RN**, Reese AT, Phillips SR, Owens LA, Venable EM, Langergraber KE, Machanda ZP, Mitani JC, Muller MN, Watts DP, Wrangham RW, Goldberg TL, Emery Thompson M. April 12, 2021. Humans and chimpanzees exhibit divergent patterns of gut microbial diversity in early life. AAPA, Baltimore, MD (presented online due to COVID-19).
- Chadaideh KS, **Carmody RN**. June 20, 2020. Dietary fat type influences host and microbial contributions to metabolic health. American Society for Microbiology (ASM) Microbe, Chicago, IL (canceled due to COVID-19).
- Carmody RN**. April 16, 2020. Alternative energy: evidence for gut microbiome-mediated buffering of human energy balance. AAPA, Los Angeles, CA (presented online due to COVID-19).

CONFERENCE PROCEEDINGS (CONTINUED)

- Chadaideh KS, **Carmody RN**. April 16, 2020. Fats are differentially fattening: Host-microbial interactions in energy harvest from dietary lipids. AAPA, Los Angeles, CA.
- Reese AT, **Carmody RN**. August 15, 2019. Domestication effects on the mammalian gut microbiota are mediated by dietary shifts. Ecological Society of America (ESA), Louisville, KY.
- Chadaideh KS, **Carmody RN**. June 22, 2019. Dietary fat type shapes the gut microbiota and host energy balance. ASM Microbe, San Francisco, CA.
- Schell LD, **Carmody RN**. June 21, 2019. Dietary preservatives alter the gut microbiota *in vitro* and *in vivo*. ASM Microbe, San Francisco, CA. (Outstanding Abstract Award)
- Venable EM, Bolze AS, Louis M, Christopher L, Carlson B, Garland T, **Carmody RN**. June 21, 2019. Endurance running alters the gut microbiota. ASM Microbe, San Francisco, CA.
- Kip P, Trocha KM, Tao M, O'Leary JJ, Giulietti JM, Trevino-Villareal JH, MacArthur MR, Bolze A, Burak MF, Patterson S, Ho KJ, **Carmody RN**, Guzman RJ, Mitchell J, Ozaki CK. Insights from a short-term protein-calorie restriction exploratory trial in elective carotid endarterectomy patients.
Presented May 16, 2019: Atherosclerosis, Thrombosis, and Vascular Biology Conference, Boston, MA.
Presented May 13, 2019: Vascular Research Initiatives Conference, Boston, MA.
- Chadaideh KS, **Carmody RN**. March 30, 2019. Differential energy gain from saturated and polyunsaturated fats. AAPA, Cleveland, OH.
- Carmody RN**, Venable EM, Bolze AS, Christopher L, Carlson BA, Louis MP, Garland T. March 29, 2019. Endurance running alters the gut microbiota. AAPA, Cleveland, OH.
- MacArthur MR, Trevino-Villarreal JHT, Reynolds J, Trocha K, Mitchell SJ, Chadaideh KS, Grondin Y, **Carmody RN**, Mitchell JR. June 11, 2018. Total dietary protein, not plant versus animal amino acid composition, determines health benefits. American Society for Nutrition, Boston, MA.
- Carmody RN** and Schell LD. April 14, 2018. Traditional and industrial food preservation agents shape the gut microbiota. AAPA, Austin, TX.
- Carmody RN** and Turnbaugh PJ. April 22, 2017. Food and its form: cooking shapes the gut microbiome. AAPA, New Orleans, LA. (Wiley Symposium)
- Carmody RN**, Maurice CF, Bauer K, and Turnbaugh PJ. Food-derived antimicrobial compounds shape the gut microbiota.
Presented June 12, 2014: Boston Bacterial Meeting, Cambridge, MA. (Best Poster)
Presented May 19, 2014: ASM Microbe, Boston, MA.
Presented April 2, 2014: Keystone Symposium: Exploiting and Understanding Chemical Biotransformations in the Human Microbiome, Big Sky, MT. (NIH NIDDK/NIA Scholarship)
- Carmody RN** and Turnbaugh PJ. June 15, 2013. Cooking alters gut microbial ecology. Boston Bacterial Meeting, Cambridge, MA.
- Carmody RN**, Secor SM and Wrangham RW. April 12, 2013. Food processing reduces thermogenesis following meat or tuber meals in a model omnivorous mammal. AAPA, Knoxville, TN.
- Carmody RN**. February 18, 2013. Contributions of food processing to dietary energy harvest. American Association for the Advancement of Science (AAAS), Boston, MA. Symposium Organizer and Chair.
- Carmody RN**. April 15, 2012. Alternative energy: modeling the effects of processed diets on human energy metabolism. AAPA, Portland, OR.
- Carmody RN**, Weintraub GS and Wrangham RW. April 15, 2011. More valuable meat: energetic effects of cooking on a key hominin resource. AAPA, Minneapolis, MN.

CONFERENCE PROCEEDINGS (CONTINUED)

- Wrangham R and **Carmody R**. September 11, 2010. The influence of the control of fire on human life history and social behavior. Fourth Symposium of Biodiversity & Evolution, Kyoto, Japan.
- Carmody RN**, Weintraub GS and Wrangham RW. April 15, 2010. Energetic significance of food processing: a case study in tubers. AAPA, Albuquerque, NM.
- Carmody RN**, Weintraub GS, Secor SM and Wrangham RW. January 6, 2010. Energetic significance of food processing: a test of the cooking hypothesis. Society for Integrative and Comparative Biology (SICB), Seattle, WA.
- Roach NT, **Carmody R**, Reiches M, McRae E and Georgiev A. April 4, 2009. Interpreting hominin variability: a test of the template method. AAPA, Chicago, IL.
- Wrangham RW and **Carmody RN**. February 28, 2009. The impact of cooking in human evolution. New York Consortium for Evolutionary Primatology (NYCEP) Conference on Darwin's Legacy, New York, NY.
- Wrangham RW and **Carmody RN**. February 12, 2009. A primatological perspective on the evolution of human diets. AAAS, Chicago, IL.
- Carmody RN**, Cone EB, Wrangham RW and Secor SM. January 7, 2009. Cooking and the net energy value of meat: implications for human evolution. SICB, Boston, MA.
- Boback SM, Cox CL, Ott BD, **Carmody R**, Wrangham RW and Secor SM. January 5, 2007. Testing the selective advantage of cooking in human evolution. SICB, Phoenix, AZ.
- Carmody RN** and Wrangham RW. April 8, 2006. Travel cost of group size: evidence of compensation in the grey-cheeked mangabey. New England Biological Anthropology Symposium, Cambridge, MA.

MENTORING & TEACHING

POSTDOCTORAL: Aspen Reese (Junior Fellow, Harvard Society of Fellows; now tenure-track at UCSD)

GRADUATE: Ph.D. advisor for:

Cary Allen-Blevins (current, Harvard, Human Evolutionary Biology [HEB])

Katia Chadaideh (current, Harvard, HEB)

Laura Schell (current, Harvard, HEB, awarded NSF Graduate Research Fellowship)

Emily Venable (current, Harvard, HEB, awarded NSF Graduate Research Fellowship)

Amar Sarkar (current, Harvard, HEB; awarded Harvard Presidential Fellowship)

Ph.D. committee member for:

Andrew Cunningham (Ph.D. 2020, Harvard, HEB)

Catherine Girard (Ph.D. 2017, University of Montreal, Microbial Evolutionary Genomics)

Qualifying exam committee member for:

Tim Kistner (current, Harvard, HEB)

Megan Michel (current, MPI-SHH & Harvard, HEB)

Vayu Maini Rekdaal (Ph.D. 2020, Harvard, Molecules, Cells, and Organisms [MCO])

Secondary advisor for:

Sophie Barton (current, Harvard, HEB)

Joel Ramirez (current, Harvard, HEB)

Independent research mentor for:

Anesta Iwan (M.D.E. 2019, Harvard, GSD/SEAS; awarded Outstanding Design Project)

UNDERGRADUATE: Honors thesis advisor or co-advisor for:

Vivian Lee (A.B. 2021, Harvard, HEB; PRISE fellowship)

Benjamin Ho (A.B. 2021, Harvard, HEB, HCRP Fellowship)

Jessica Diaz (A.B. 2020, Harvard, Integrative Biology; Herchel-Smith Fellowship)

Caroline Diggins (A.B. 2020, Harvard, HEB; HCRP Fellowship, Hoopes Prize)

Kevin Eappen (A.B. 2020, Harvard, Integrative Biology; HCRP Fellowship)

Andrew Bolze (A.B. 2019, Harvard, HEB; AHA Research Fellowship)

Brandi Moore (A.B. 2019, Harvard, HEB; HCRP Fellowship)

Laura Schell (A.B. 2018, Harvard, HEB; HCRP Fellowship)

Patrick Schiller (A.B. 2015, Harvard, HEB)

Emily Groopman (A.B. 2014, Harvard, HEB; Herchel-Smith Fellowship, Hoopes Prize)

Gil Weintraub (A.B. 2010, Harvard, HEB; HCRP Fellowship)

Eugene Cone (A.B. 2009, Harvard, Biological Anthropology)

Served as research mentor for 40+ additional undergraduate and graduate students.

COURSES TAUGHT IN HUMAN EVOLUTIONARY BIOLOGY (HEB):

HEB 3200: Graduate Seminar in Human Evolutionary Biology Spring 2019, Fall 2019, Fall 2020

HEB 1410: Gut Microbiome and Human Health (plus weekly 3-hour lab) * Spring 2017, Fall 2017, Fall 2018
Spring 2021, Fall 2021

HEB 2100: Diet and Exercise Spring 2017, Spring 2018

HEB 97: Sophomore Tutorial in Human Evolutionary Biology ** Spring 2011

HEB 1414: Evolution of the Human Diet ** Spring 2007

HEB 1415: Primate Evolutionary Ecology ** Fall 2006, Fall 2007

* Course featured in September 2019 issue of the Harvard Initiative for Learning and Teaching's *Into Practice*

** Recipient of graduate teaching award for this course

SYNERGISTIC ACTIVITIES & OUTREACH

MEMBERSHIPS

Broad Institute of MIT and Harvard, Associate Member
Harvard Digestive Diseases Center, Associate Member
Harvard Chan Center for the Microbiome in Public Health, Associate Member, Planning Committee
Harvard T.H. Chan School of Public Health, Microbiome Epidemiology Working Group, Member
American Association of Physical Anthropologists (AAPA), Member
American Society for Nutrition (ASN), Member
American Society for Microbiology (ASM), Member

MIDDLE SCHOOL AND HIGH SCHOOL OUTREACH

Aki Kurose Middle School, Seattle, WA: “How controlling fire changed humans.” December 2, 2020.
American Museum of Natural History, New York, NY: “The raw truth about cooking.” March 7, 2019.
Salesian College Preparatory School, Richmond, CA: “Evolution of the human diet.” February 11, 2016.

PEER REVIEWS

Ad hoc reviewer for: Cell, Science, PNAS, Nature Microbiology, Nature Reviews Microbiology, Nature Reviews Gastroenterology & Hepatology, Cell Host & Microbe, Science Translational Medicine, PLoS Biology, Genome Biology, Microbiome, American Journal of Physical Anthropology, Evolutionary Anthropology, Yearbook of Physical Anthropology, ISME Communications, International Journal of Endocrinology, American Journal of Primatology

Grant reviews: National Science Foundation, Leakey Foundation

RECENT PRESS COVERAGE

Work has been featured in Science, Cell Press Best of 2015, Nature Reviews Microbiology, PNAS, Scientific American, National Geographic, Natural History, NPR (Science Friday live broadcast and podcast), PBS NOVA, The Conversation, American Museum of Natural History (public lecture, podcast, YouTube, magazine), Science Update (podcast), Leakey Origin Stories (podcast), The New York Times, Washington Post, Philadelphia Inquirer, The Sunday Times, The Guardian, Harvard Gazette, Harvard Crimson, BBC TV and Radio (UK), CBC and Radio Canada (Canada), EBS (Korea), and SVT (Sweden).