

CURRICULUM VITAE

Mallika S. Sarma

710 Ross Research Building 720 Rutland, Johns Hopkins School of Medicine, Baltimore, MD
msarma1@jhu.edu

RESEARCH

Human adaptability in extreme/novel environments
Stress & resilience
Neural, phenotypic, & behavioral plasticity
Energetic physiology, neuroendocrine systems & behavior
Human biology in space and space medicine

EDUCATION

Ph.D. University of Notre Dame (Aug 2020)

Human Biology – Anthropology

Dissertation: *“Acclimating to the Extremes: Energy Expenditure, Neuroendocrine Systems, and Social Dynamics in Novel and Challenging Environments”*

M.A. University of Notre Dame (May 2018)

Human Biology - Anthropology

B.S. University of Michigan, Ann Arbor (May 2014)

Evolutionary Anthropology (Biology/Biological Anthropology) & Psychology

APPOINTMENTS

Aug 2021 – present

Translational Research Institute for Space Health
Postdoctoral Research Fellow
Human Spaceflight Lab
Department of Otolaryngology
Johns Hopkins School of Medicine

Jun 2020 – Aug 2021

T-32 NIH Ruth L. Kirschstein Institutional National Research Service Award Postdoctoral Research Fellow
Human Spaceflight Lab
Department of Otolaryngology
Johns Hopkins School of Medicine

FELLOWSHIPS & GRANTS

2019

American Association for University Women. AAUW Dissertation American Fellow, *Acclimating to the Extreme: Relationships between Energy Expenditure, Social Support, and Neuroendocrine Systems* - \$20,000

PEO Sisterhood. Scholar Award, *Acclimation, Adaptation, & Resilience in Extreme Environments* - \$15,000

National Science Foundation. Doctoral Dissertation Research Improvement Grant, *Acclimating to the Extreme: Energy Expenditure, Neuroendocrine Systems, and Social Dynamics in Novel/Challenging Environments* - \$20,488

2018

Human Biology Association. Student Travel Award - \$500

Institute for Scholarship in the Liberal Arts, University of Notre Dame. Graduate Research Grant, *Acclimating to the Extreme: Energy Expenditure, Neuroendocrine Systems, and Social Dynamics in Novel/Challenging Environments* - \$4,000

CURRICULUM VITAE

- 2017 Institute for Scholarship in the Liberal Arts, University Notre Dame. Graduate Research Grant, Women's Work: Endocrine Physiology During Subsistence Labor in the Republic of the Congo - \$4,000
- National Science Foundation. NSF-American Association for Physical Anthropologists Committee on Diversity IDEAS Fellow.
- 2016 National Science Foundation. NSF Graduate Research Fellowship, Living the High Life: Differential Acute Endocrine Changes in High Altitude (2016 – 2019)
- Eck Center for Global Health, University of Notre Dame. Travel, Research, and Training Grant, Living the High Life: Subsistence Farming in High Altitude and Long Term Health Effects - \$4,000
- Liu Institute for Asia and Asian Studies, University of Notre Dame. Summer Research Grant, Living the High Life: Subsistence Farming in High Altitude and Long Term Health Effects - \$2,000
- 2015 Office of Grants and Fellowships, University of Notre Dame. Graduate Grant Writing Training Grant - \$1000
- Office of the Dean, University of Notre Dame. Dean's Fellowship (2015-2020)
- 2013 Honors Program, University of Michigan. Honors Summer Fellowship Award, Mindfulness, Psychological Well Being, Emotion Regulation, and Creativity among South Asian Americans - \$4000
- 2012 Department of Psychology, University of Michigan. Student Travel Award - \$500
- Center for the Education of Women. Rieker Undergraduate Grant - \$2,000

PEER-REVIEWED PUBLICATIONS (17)

- UNDER REVIEW Gettler, LT, Rosenbaum, S, Kuo, PX, Sarma, MS, Bechayda, SA, McDade, TW, Kuzawa, CW. Under Review. Evidence for an adolescent sensitive period to family experiences influencing adult male testosterone production. PNAS.
- 2021 Gettler, LT, Kuo, PX, Sarma, MS, Lefever, JEB, Cummings, ME, McKenna, JJ, Braungart-Rieker, JM. 2021. U.S. fathers' reports of bonding, infant temperament, and psychosocial stress based on family sleep practices. *Evolution, Medicine, and Public Health*.
- Sarma, MS, Gildner, T, Howells, M, Lew-Levy, S, Trumble, BC, Fuentes, A. 2021. There and back again: The Biosocial Dynamics of Returning from the Field. *American Journal of Human Biology*.
- Sarma, MS, Ocobock, CJ, Martin, S, Rochelle, S, Croom, BP, Gettler, LT. 2021. Sex differences and shifts in body composition, physical activity, and total energy expenditure across a 3-month expedition. *American Journal of Human Biology*.
- Kilius, E, Samson, DR, Lew-Levy, S, Sarma, MS, Patel, U, Oumba, YR, Miegakanda, V, Gettler, LT, Boyette, AH. In Press. BaYaka sleep biology: A comparison of village and forest gender-based differences in sleep-wake patterns in mobile foragers. *Nature Scientific Reports*.
- Gettler, LT, Kuo, PX, Sarma, MS, Trumble, BC, Lefever, JEB, Braungart-Rieker, JM. 2021. Fathers' oxytocin responses to first holding their newborns: Interactions with reactivity to predict later parenting behavior and father-infant bonds. *Developmental Psychobiology*.

CURRICULUM VITAE

- Gettler, LT, Lew-Levy, S, Sarma, MS, Miegakanda, V, Meyer, J, Boyette, AH. 2021. Children's cortisol among BaYaka foragers: Associations with fathers' roles and parental physiology. *Philosophical Transactions of the Royal Society B*.
- 2020
- Ocobock, C, Lynn, C, Sarma, MS, Gettler, LT. 2020. Organized adult play and stress reduction: Testing the Absorption Hypothesis in a comedy improv theatre. *Adaptive Human Behavior and Physiology*.
- Gettler, LT, Lew-Levy, S, Sarma, MS, Boyette, AH. 2020. When sharing is caring: Testosterone, fathering, and generosity among BaYaka foragers of the Congo Basin. *Nature Scientific Reports*.
- Sarma, MS, Boyette, AH, Lew-Levy, S, Miegakanda, V, Samson, D, Kilius, E, Gettler, LT. 2020. Sex differences in daily activity intensity and energy expenditure and their relationship to cortisol among BaYaka foragers from the Congo Basin. *American Journal of Physical Anthropology*.
- 2019
- Boyette, AH, Lew-Levy, S, Sarma, MS, Miegakanda, V, Gettler, LT. 2019. Fatherhood, egalitarianism, and child health in two small-scale societies in the Republic of the Congo. *American Journal of Human Biology*.
- Gettler, LT, Sarma, MS, Lew-Levy, S, Bond, A, Trumble, BC, Boyette, AH. 2019. Mothers' and fathers' joint profiles for testosterone and oxytocin in a small-scale fishing-farming community: variation based on marital conflict and paternal contributions. *Brain and Behavior*.
- Gettler, LT, Gengo, RG, Sarma, MS, Oka, RC, McKenna, JJ. 2019. Testosterone moderates the effects of social support on cardiovascular-disease risk factors among Older U.S. Men. *American Journal of Human Biology*.
- 2018
- Boyette, A, Lew-Levy, S, Sarma, MS, Gettler, LT. 2018. Testosterone, fathers as providers are caregivers, and child health: Evidence from fisher-farmers in the Republic of the Congo. *Hormones and Behavior*.
- Sarma, MS, Gettler, LT, Childs, G, Quinn, EA. 2018. When women work: Endocrine reactivity in women during everyday physical activity at high altitude. *American Journal of Human Biology*.
- Kuo, PX, Braungart-Rieker, JM, Lefever, JEB, Sarma, MS, O'Neill, MS, Gettler, LT. 2018. Fathers' cortisol and testosterone in the days around infants' births predict later paternal involvement. *Hormones and Behavior*.
- Sarma, MS, Kuo, PX, Bechayda, SA, Kuzawa, CW, Gettler, LT. 2018. Exploring the links between early life and young adulthood social experiences and men's later life paternal psychobiology. *Physiology and Behavior*.
- 2017
- Gettler, LT, Sarma, MS, Gengo, RG, Oka, RC, McKenna, JJ. 2017. Adiposity, CVD risk factors, and testosterone: variation by partnering status and residence with children in U.S. men. *Evolution, Medicine, and Public Health*.

PROFESSIONAL PRESENTATIONS (50)

- 2022
- Ali, NN, Sarma, MS, Tang, S, Menon, AS, Mateus, J, Shelhamer, M. 2022. Measurement of Otolith Asymmetry through Ocular Misalignment in Commercial Astronauts. Poster. Aerospace Medical Association. Reno, NV. May, 2022.

CURRICULUM VITAE

Homolka, C, Boyette, AH, Sarma, MS, Miegakanda, V, Lew-Levy, Gettler, LT. 2021. Mothers' testosterone and body composition in BaYaka foragers and Bondongo farmers: variation by community and youngest child's age. Poster. Am J Hum Biol. Human Biology Annual Meeting. Denver. March, 2022.

Sarma, MS. 2022. The Human Biology of spaceflight. Plenary Podium. Am J Hum Biol. Human Biology Annual Meeting. Denver, CO. March, 2022.

Sarma, MS, Shelhamer, M.. 2022. Stress response and neurovestibular compensation and the potential ameliorative effects of team support. Poster. NASA Human Research Program Investigator's Workshop. Virtual. February, 2022. [Best Postdoc Poster Award].

Shelhamer, M, Ali, NN, Johnson, B, Yogaratnam A, Sarma, MS, Schubert, M. 2022. Investigation of partial-g effects on ocular alignment. Poster. NASA Human Research Program Investigator's Workshop. Virtual. February, 2022.

Shelhamer, M, Ali, N, Sarma, MS, Schubert, M. 2022. Otolith and posture evaluation. Podium. NASA Human Research Program Investigator's Workshop. Virtual. February, 2022.

Tang, S, Sarma, MS, Ali, N, Shelhamer, M. Vestibular and postural assessment device and methods. Poster. NASA Human Research Program Investigator's Workshop. Virtual. February, 2022.

2021

*Ali, NN, Wang, A, Shrestha, S, Yogaratnam, A, Shelhamer, M, Sarma, MS. 2021. Correlation of perceived stress and mood to sensorimotor accuracy in virtual vs. in-person settings. Poster. American Society for Gravitational and Space Research. Baltimore, MD. November, 2021.

Sarma, MS, Ocobock, CJ, Rochelle, S, Martin, S, Gettler, LT. 2021. Social support, perceived stress, resilience and cortisol response when acclimating to novel and challenging environments. Poster. Am J Hum Biol. Human Biology Annual Meeting. Virtual. March, 2021.

Kilius, E, Samson, DR, Lew-Levy, S, Sarma, MS, Gettler, LT, Boyette, AH. 2021. Sex differences in sleep patterns among egalitarian foragers: An intra-community comparison of village and forest sleep of BaYaka foragers from the Congo. Poster. Am J Hum Biol. Human Biology Annual Meeting. Virtual. March, 2021.

Kilius, E, Samson, DR, Lew-Levy, S, Sarma, MS, Gettler, LT, Boyette, AH. 2021. The influence of lunar phase on circadian rhythms in semi-nomadic, non-industrial population: An intra-community comparison of village and forest sleep of BaYaka foragers from the Congo. Poster. Am J Phys Anthropol. AAPA Annual Meeting. Virtual. March, 2021.

2020

Bennett, B, Sarma, MS, Stieger, J. 2020. From Neurofeedback to wilderness medicine: Leveraging EEG-based technologies for sustained exploration-class human performance. Round Table. ASCEND by the American Institute of Aeronautics and Astronautics (AIAA). Virtual. November, 2020.

*Younkle, C, Sarma, MS, Boyette, AH, Lew-Levy, S, Miegakanda, V, Gettler, LT. 2020. Time allocation differences by sex and age among egalitarian BaYaka foragers. Poster. Am J Hum Biol. Human Biology Annual Meeting. Los Angeles, CA. April, 2020. [Cancelled due to COVID-19]

*Kirgios, VS, Sarma, MS, Ocobock, CJ, Rochelle, S, Martin, S, Musema, JP, Gettler, LT. 2020. Sex differences in received social support and health outcomes in extreme

CURRICULUM VITAE

conditions. Poster. Am J Hum Biol. Human Biology Annual Meeting. Los Angeles, CA. April, 2020. [Cancelled due to COVID-19]

*Musema, JP, Sarma, MS, Ocobock, CJ, Rochelle, S, Martin, S, Kirgios, VS, Gettler, LT. 2020. Minimal daily heart rate during acclimatization to extreme conditions: individual differences during a multi-month Rocky Mountain wilderness expedition. Poster. Am J Hum Biol. Human Biology Annual Meeting. Los Angeles, CA. April, 2020. [Cancelled due to COVID-19]

Sarma, MS, Ocobock, CJ, Rochelle, S, Martin, S, Gettler, LT. 2020. Social support and cortisol response when acclimating to novel and challenging environments. Poster. Am J Hum Biol. Human Biology Annual Meeting. Los Angeles, CA. April, 2020. [Cancelled due to COVID-19]

Sarma, MS, Ocobock, CJ, Rochelle, S, Martin, S, Gettler, LT. 2020. Changes in body composition during short-term acclimatization to highly challenging environments. Podium. Am J Phys Anthropol. AAPA Annual Meeting. Los Angeles, CA. April, 2020. [Cancelled due to COVID-19]

Kilius, E, Samson, DR, Lew-Levy, S, Sarma, MS, Gettler, LT, Boyette, AH. 2020. Shifting sleep ecologies among foragers: An intra-community comparison of village and forest sleep of BaYaka foragers from the Congo. Am J Phys Anthropol. AAPA Annual Meeting. Los Angeles, CA. April, 2020. [Cancelled due to COVID-19]

Sarma, MS, Ocobock, CJ, Gettler, LT. 2020. Group dynamics, cortisol stress response, and resilience during extended expeditions in an analog environment. Poster. NASA Human Research Program Investigator's Workshop. Galveston, TX. Jan, 2020.

2019

Sarma, MS, Ocobock, CJ, Gettler, LT. 2019. Human Energy Expenditure, Physical Activity, and Cortisol Responsivity in Extreme Environments. Poster. American Society for Gravitational and Space Research. Denver, CO November, 2019.

Sarma, MS, Lew-Levy, S, Boyette, AH, Miegakanda, V, Gettler, LT. 2019. MOLONGA: Social dynamics, physical activity, and hormone reactivity among BaYaka foragers. Poster. Am J Hum Biol. Human Biology Annual Meeting. Cleveland, OH. March, 2019.

Gettler, LT, Sarma, MS, Lew-Levy, S, Boyette, AH. 2019. Mothers' and fathers' testosterone and oxytocin in a small-scale fishing farming community: Variation based on marital conflicts and parental contributions. Poster. Am J Hum Biol. Human Biology Annual Meeting. Cleveland, OH. March, 2019.

Boyette, AH, LeHanka, A, Sarma, MS, Lew-Levy, S, Miegakanda, V., Gettler, LT, 2019. BaYaka foragers' daily strength-requiring activities and physically intensive demands: variation by sex but few anthropometric correlates. Poster. Am J Hum Biol. Human Biology Annual Meeting. Cleveland, OH. March, 2019.

Ocobock, CJ, Sarma, MS, Lynn, C, Gettler, LT. "Yes, and..." How performing improvisational comedy reduces stress and promotes well-being. Flash Talk. Am J Hum Biol. Human Biology Annual Meeting. Cleveland, OH. March, 2019.

Kuo PX, Braungart-Rieker J, Lefever JB, Sarma MS, O'Neill M, Gettler LT. 2019. Fathers' cortisol and testosterone in the days following infants' births predict later paternal involvement. Poster. Society for Research on Child Development Biennial Meeting. March, 2019. Baltimore, MD.

Boyette AH, Lew-Levy S, Sarma MS, Meigakanda VB, Gettler LT. 2019. Fatherhood, egalitarianism, and child health in Republic of the Congo. Society for Cross-Cultural Research Annual Meeting. February, 2019. Jacksonville, FL.

CURRICULUM VITAE

- Sarma, MS, Ocobock, CJ, Gettler, LT. 2019. Sex Differences in Body Composition, Physical Activity, and Total Energy Expenditure When in a Challenging and Novel Environment. Podium. Women In Space Con. Scottsdale, AZ. Feb, 2019.
- Sarma, MS, Ocobock, CJ, Gettler, LT. 2019. Total Energy Expenditure and Social Context/Dynamics in Extreme Environments. Poster. NASA Human Research Program Investigator's Workshop. Galveston, TX. Jan, 2019.
- 2018
- Sarma, MS, Ocobock, CJ, Gettler, LT. 2018. Energy expenditure and social/group dynamics in extreme environments. Poster. American Society for Gravitational and Space Research. Washington D.C. November, 2018.
- Puckett, T, Sarma, MS, Gettler LT, Lynn, C, Ocobock, C. 2018. Improvisational comedy performance as collective effervescence reduces anxiety and promotes well-being. Poster. American Anthropological Association. San Jose, CA. Nov, 2018.
- Sarma, MS, Boyette, AH, Lew-Levy, S, Miegakanda, V, Gettler, LT. 2018. Foragers Hard at Work: Sex differences in hormone production, physical activity, and energy expenditure among the Mbenjele. Podium. Am J Hum Biol. Human Biology Association Annual Meeting. Austin, TX. April, 2018.
- Sarma, MS. 2018. "Physiology at the Final Frontier: The Role of Biological Anthropology in Human-Space Research" in IDEAS Alumni Symposium: Creating and Supporting Diverse Communities within the AAPA. Poster. Am J Phys Anthropol. AAPA Annual Meeting. Austin, TX. April, 2018.
- Gengo, RG, Oka, RC, Sarma, MS, McKenna, JJ, Gettler, LT. 2018. Social Support Moderates Testosterone's Health Effects in a Nationally Representative Sample of Aging US Men. Poster. Am J Hum Biol. Human Biology Association Annual Meeting. Austin, TX. April, 2018.
- 2017
- Sarma, MS, Lew-Levy, S, Boyette, AH, Gettler, LT. 2017. Measuring Movement: Method Validation for Collecting Human Activity Intensity and Energy Expenditure in Extreme Environments. Podium. American Society for Gravitational and Space Research Annual Meetings. Seattle, WA. October, 2017.
- Sarma, MS, Bechayda, SA, Gettler, LT. 2017. Early life influences on dual-hormone output in fathers when playing with their children. Poster. Am J Phys Anthropol. AAPA Annual Meeting. New Orleans, LA. Aril, 2017.
- Gettler, LT, Sarma, MS, Gengo, RG, Oka, RC, McKenna, JJ. 2017. "Dad Bod" as an evolutionary mismatch: testosterone, adiposity, and CVD-risk factors in a population-representative sample of U.S. men. Podium. Am J Hum Biol. Human Biology Association Annual Meeting. New Orleans, LA. April, 2017.
- Sarma, MS, Gettler, LT, Childs, G, Quinn, EA. 2017. Women's work: the effect of altitude on energy expenditure and endocrine reactivity. Poster. Am J Hum Biol. Human Biology Association Annual Meeting. New Orleans, LA. April, 2017.
- 2016
- Sarma MS, Gettler LT, Childs G, Quinn EA. 2016. Daily energy expenditure and activity intensity in populations adapted to highly challenging and harsh environments. Poster. American Society for Gravitational and Space Research Annual Meetings. Cleveland, OH, USA. October, 2016.
- https://www.openconf.org/asgsr2016/modules/request.php?module=oc_proceedings&action=summary.php&id=138&a=Accept+as+Poster

CURRICULUM VITAE

Sarma MS. 2016. Researching Across and Living With Differences: Interrogating positionalities and Anthropological knowledge production. Discussant. Feminist Epistemologies, Methodologies, Metaphysics, and Science Studies. Notre Dame, IN, USA. October, 2016.

Niklinska, EB, Tumminello, M, Sarma, MS, Braungart-Rieker, J, Cummings, EM, Burke, J, Gettler, LT. 2016. An exploratory analysis of the relationships between mothers' and fathers' testosterone, general well-being, and depression levels. Poster. Human Behavioral Evolution Society Annual Meetings. Vancouver, Canada. June, 2016.
http://www.hbes.com/wp-content/uploads/2016/02/HBES2016FullProgram_7.pdf

Tumminello, M, Niklinska, EB, Tumminello, M, Sarma, MS, Braungart-Rieker, J, Cummings, EM, Burke, J, Gettler, LT. 2016. Intersections between parental sleep quality, testosterone, individual well-being, and relationship happiness. Poster. Human Behavioral Evolution Society Annual Meetings. Vancouver, Canada. June, 2016. http://www.hbes.com/wp-content/uploads/2016/02/HBES2016FullProgram_7.pdf

Sarma, MS, Gettler, LT. 2016. Early life and young adulthood predictors of fathers' hormonal reactivity during interactions with their toddlers. Poster. Human Biology and Evolution Society, Vancouver, BC, Canada. July, 2016.

Sarma, MS, Kuzawa, CW, Feranil, AB, Gettler, LT. 2016. "Early Life Social Influences on Men's Testosterone & Parenting Behavior" In Allomother - infant relationships across the Primate order: biomarkers, bonding, buffering, and other bidirectional effects. Podium. Am J Hum Biol. Human Biology Association Annual Meeting. Atlanta, GA. April, 2016.

Sarma, MS. 2016. Cyborg Dancers: Cross-Cultural Gurukulum Pedagogy in the Maintenance and Innovation the Ancient Arts. Podium. Second City Graduate Conference, Chicago, IL. March, 2016.

- 2014 Sarma, MS. 2014. Mindfulness, psychological well-being, emotion regulation, and creativity among South-Asian Americans, Honors Thesis
- 2013 Sarma, MS, Clerkin, C. 2013. Are you ideal? Examining cross-cultural desired characteristics in long-term ideal partners. Poster. Midwestern Psychological Association annual conference, Chicago, IL. May, 2013.
- Sarma, MS, Clerkin, C. 2013, May The Mr. Right misconception. Poster. Association for Psychological Science annual convention, Washington D.C. May, 2013.
- 2012 Sarma, MS, Clerkin, C., Hong, Y. 2012. Are engineers hot or not? Poster. Association for Psychological Science annual convention, Chicago, IL. May, 2013.
- 2011 Sarma, MS, Ng, J. 2011. ...How are you getting there? Relationship between cultural intelligence and creativity. Poster. Undergraduate Research Opportunity Program Symposium, UROP, Ann Arbor, MI. April, 2011.

*denotes primary supervision of student-led presentations

INVITED TALKS

- 2022 Sarma, MS. 2022. A Journey into Human Spaceflight. Nursing Research Seminar, Johns Hopkins School of Nursing, Baltimore, MD (Zoom), Mar, 2022.
- Sarma, MS, Gildner, T, McClure, S, Kuhlmann, AS, Glass, D, Lynn, C. 2022. Hacks for Succeeding in Academia Webinar #3: The Cultureshocks of Coming Home and Communicating across Disciplines. Webinar. Jan, 2022.

CURRICULUM VITAE

- 2021
- Sarma, MS, Ames, N. 2021. Active Travel. Notre Dame Staff of International Descent, Notre Dame University, Notre Dame, IN (Zoom), Apr, 2021.
- Sarma, MS. 2021. The effect of virtual vs. In-person feedback on stress responsivity and sensorimotor performance and adaptation. Center for Hearing and Balance, Johns Hopkins School of Medicine, Baltimore, MD (Zoom), Jan, 2021.
- 2020
- Sarma, MS. 2020. To Infinity and Beyond: Human Biology and Evolution in the Time of Human Spaceflight. Center for Evolution and Medicine, Arizona State University, Tempe, AZ (Zoom), Nov, 2020.
- Sarma, MS. 2020. Modern Human Evolution and Variation. Introduction to Anthropology 10109. University of Notre Dame, Notre Dame, IN (Zoom), Aug, 2020.
- Sarma, MS. 2020. Habitat & Hazards of Human Spaceflight Seminar. Space University Bridge, Girls STEM Pathway. Space Center Houston, Houston, TX (Zoom), Aug, 2020.
- Sarma, MS. 2020. Space Research in Analog Environments. Panelist. Women in Space Con, Canadian Space Agency, Quebec City, CA. May 2020. [Cancelled due to COVID-19]
- Sarma, MS. 2020. Human Biology at the Extremes. Invited Talk. K-12 Science Outreach. Tallwood Highschool Global Studies and World Languages Academy Anthropology Speaker Series, Virginia Beach, VA, Apr, 2020.
- 2019
- Sarma, MS. 2019. Humans in Space: Adapting to the Final Frontier. Invited Talk. Public Lecture. Ethical Humanist Society, Skokie, IL. Nov, 2019
- Sarma, MS. 2019. Beyond Biological Anthropology: Bio-Behavioral Acclimation to Extreme Environment. Invited talk. Undergraduate Outreach. Grand Valley State University Anthropology of Space Senior Capstone, Grand Rapids, MI, Oct, 2019
- Sarma, MS. 2019. Bio-Behavioral Acclimation and Adaptation to Extreme Environments. Invited Talk. US Airforce Research Lab, Dayton, OH. Oct, 2019
- Sarma, MS. 2019. Humans in Space! Invited Talk. K-12 Science Outreach. University of Wyoming Astrocamp (9-12th graders). Laramie, WY. July, 2019.
- Sarma, MS. 2019. Acclimate2Extremes: Assessing Physiology & Behavior in NOLS Students Project Review & Updates. Invited Talk. Public Lecture. Convention of the Wyoming State Chapter, P.E.O. Worland, WY. June, 2019.
- Sarma, MS 2019. Acclimate2Extremes: Assessing Physiology & Behavior in NOLS Students Project Review & Updates. Invited Talk. The National Outdoor Leadership School Faculty Summit. Lander, WY. May, 2019.
- 2018
- Sarma, MS. 2018. Acclimate2Extremes: Changes in Physiology & Behavior in Novel/Challenging Environments. Invited Talk. Rotary Club. Lander, WY. Nov, 2018.
- Sarma, MS. 2018. Acclimate2Extremes: Changes in Physiology & Behavior in During NOLS Courses. Invited Talk. National Outdoor Leadership School, Headquarters. Lander, WY. Nov, 2018.

CURRICULUM VITAE

Sarma, MS, Ames, NP. 2018. Meta-point, beyond the Powerpoint: A Presentation on Presentations. Invited Talk and Workshop. University of Notre Dame Department of Anthropology. Notre Dame, IN. April, 2018.

2016 Sarma, MS. 2016. Living the High Life: Using high altitude research to understand adaptations in extreme environments. Invited Talk. Reilly Center for Science, Technology, and Values External Advisory Board Meeting. March, 2016.

OUTREACH

2021 Sarma, MS. 2021. Mentorship Café, Girls STEM Pathway. Space Center Houston, Houston, TX (Zoom), Jan 2021 - May, 2021.

2020 Sarma, MS. 2020. Human Spaceflight Journal Club. Human Spaceflight Lab, Johns Hopkins School of Medicine, Baltimore, MD (Zoom), Jul 2020 – Dec 2020.

Sarma, MS. 2020. Human Spaceflight Virtual Networking Happy Hours. Human Spaceflight Lab, Johns Hopkins School of Medicine, Baltimore, MD (Zoom), Jul 2020 – Dec 2020.

Sarma, MS. 2020. Mentorship Café, Girls STEM Pathway. Space Center Houston, Houston, TX (Zoom), Jul 2020 - Dec, 2020.

2019 Sarma, MS, American Society for Gravitational and Space Research Student Board. 2019. International Astronautical Congress Science Days – Targeted for DC area middle schoolers. K-12 Science Outreach. Space science educator and facilitator. International Astronautical Congress, Washington DC. Oct, 2019.

Sarma, MS 2019. “Live Science Tweeter” Twitter correspondent. Human Biology Association Annual Meetings. Cleveland, OH. March, 2019.

2018 Sarma, MS 2018. “Live Science Tweeter” Twitter correspondent. Human Biology Association Annual Meetings. Austin, TX. April, 2018.

2017 Sarma, MS 2017. “Live Science Tweeter” Twitter correspondent. Human Biology Association Annual Meetings. New Orleans, LA. April, 2017.

Sarma, MS, Chesson, M 2017. Educator. Expanding Your Horizons (EYH) STEM Outreach for Girls (6-12th graders). Notre Dame, IN. May, 2017.

2016 Sarma, MS, Fuentes, A 2016. Educator. University of Notre Dame Center for Arts & Culture. South Bend, IN. February, 2016.

Sarma, MS, Chesson, M 2017. Educator. Expanding Your Horizons (EYH) STEM Outreach for Girls (6-12th graders). Notre Dame, IN. May, 2016.

2015 Sarma, MS, Chesson, M 2017. Educator. South Bend Elementary School Anthropology & Archaeology Workshop). South Bend, IN. September, 2015.

Sarma, MS, Fuentes, A 2015. Educator. University of Notre Dame Center for Arts & Culture. South Bend, IN. November, 2015.

SCIENTIFIC COMMUNICATION

2020 Sarma, MS, Kazilek, C. 2020. Ask a Biologist. Living in Extreme Worlds. Podcast. Vol 104. Retrieved from <https://askabiologist.asu.edu/listen-watch/living-extreme-worlds>

CURRICULUM VITAE

- Sarma, MS, Sarma, M. 2020. Gladiatrix: Hear Me Roar. Space, STEM, and Saving the World – A Millennial Perspective with Dr. Mallika Sarma. Retrieved from <https://www.stitcher.com/show/gladiatrix-hear-me-roar/episode/space-stem-and-saving-the-world-a-millennial-perspective-with-dr-mallika-sarma-78009332>
- Sarma, MS, Fuentes, A. 2020. Evolutionary Anthropology in the time of COVID-19. Anthropology News. Essay. Retrieved from: <https://www.anthropology-news.org/index.php/2020/09/02/evolutionary-anthropology-in-the-time-of-covid-19/>
- 2019 Sarma, MS, Rivera, M. 2019. The Arch and Anth Podcast. How do humans adapt to extreme environments? Could humans live in space? Podcast. Ep 25. Retrieved from <https://archandanth.com/episode-25-interview-with-mallika-sarma/>
- Sarma, MS, Robins, J. 2019. WeMartians: Women in Space 2019 (ft Mallika Sarma and Jennifer Grier). Podcast. Ep 504. Retrieved from <https://www.wemartians.com/episode054/>
- 2018 Sarma, MS, Ocobock, CJ, Lynn, C. Human Biology Association's Sausage of Science: Do it to the Extreme – A chat with Mallika Sarma. Podcast. Ep 22. Retrieved from <https://soundcloud.com/humanbiologyassociation/sos-episode-22-mallika-sarma>
- 2017 Gettler, LT, Sarma, MS. 2017. On the Origins of Dad Bod. Oxford University Press Blog. Blogpost. Retrieved from <https://blog.oup.com/2017/04/origins-dad-bod/>
- 2016 Cortez, A., D'Shaun, PI, Rokhideh, M, Sarma, MS. 2016. The Other Scholars: Thinking about knowledge reproduction in Anthropology. Anthropology News. Blogpost. <http://onlinelibrary.wiley.com/doi/10.1111/AN.266/abstract>
- 2014 Sarma, MS, Clerkin, C. 2014. Becoming superhuman: Is it all in your mind? Blogpost. Retrieved from <http://www.in-mind.org/blog/post/becoming-superhuman-is-it-all-in-your-mind>
- POPULAR PRESS FEATURES
- 2020 Adkins, LT. Human biologist Mallika Sarma has no space for excuses. <https://www.aaas.org/membership/member-spotlight/human-biologist-mallika-sarma-has-no-space-excuses>
- 2019 Rochelle, S. Research at NOLS: How NOLS courses help prepare for extended expeditions in space. <https://blog.nols.edu/2019/05/23/research-for-space-prep>
- Smith, B. Women Astronauts may be better suited to space than men – but not by much. <https://www.abc.net.au/news/science/2019-04-08/why-women-may-be-slightly-better-suited-to-space-living-than-men/10941616>
- 2018 Gates, C. Anthropology Ph.D. student takes her research to new heights. <https://research.nd.edu/news/anthropology-ph-d-student-takes-her-research-to-new-heights/>
- HONORS & AWARDS
- 2022 NASA Human Research Program Investigator's Workshop Postdoc Poster Award
- 2021 Eli J. and Helen Shaheen Graduate School Award in Social Sciences (Premier graduate award recognizing the top graduate students in divisions of science, engineering, humanities, and social sciences) - \$5,000
- 2019 3-Minute Thesis Notre Dame Finalist & 1st Runner Up- \$1,600
NASA Human Research Program Investigator's Workshop Student Poster Award

CURRICULUM VITAE

2017	Kaneb Center Outstanding Teaching Award
2014	Honors thesis with distinction Psi Chi Honor Society University of Michigan Honors
2013	Psi Chi Honor Society University of Michigan Honors Invitation for Mortar Board Invitation for Phi Kappa Pi Honors Society
2012	Undergraduate Research Opportunity Program “Best Poster” award Psi Chi Honor Society University of Michigan Honors
2011	Psi Chi Honor Society University of Michigan Honors

RESEARCH EXPERIENCE

Human Spaceflight Lab Postdoctoral Research Fellow (2020 – present)

Department of Otolaryngology, Johns Hopkins School of Medicine

Postdoc Advisor: Dr. Mark Shelhamer

Research project: Several projects assessing neurovestibular function, human physiological plasticity, stress responsivity, adaptation and resilience in spaceflight contexts

Projects include:

- Virtual Support, Stress Response, & Sensorimotor Adaptation and Performance (NIH-funded, primary PI)
- Network Resilience in Aging Populations and Relevance to Human Spaceflight Contexts (primary PI)
- Partial-g Ocular Alignment in Parabolic Flight
- Sensorimotor Assessment and Treatment of Vestibular Dysfunction
- Oculomotor Disorders: Experimental and Clinical Study

Skills & Methodologies: Sensorimotor and oculomotor research design and experimental human subjects research; STATA and R data analysis; managing undergraduate, graduate, and medical research; mentoring undergraduates, graduate, and medical students

Hormones, Health, and Human Behavior Lab Researcher and Coordinator (2015-2020)

Department of Anthropology, University of Notre Dame

PhD Advisor: Dr. Lee Gettler

Research project: Several projects considering human physiological plasticity; influences on life history trajectories (environmental pressures, psychosocial stressors), and endocrine output of testosterone and cortisol

Projects include:

- ****Biobehavioral Acclimation to Novel/Challenging Environments – Acclimate2Extremes with the National Outdoor Leadership School (NOLS) (American Rocky Mountains, USA)**
- **Endocrine Profiles and Changes as Men Become Fathers (Cebu, Philippines)**
- ****Endocrine Profiles and Changes to Fathers During Childbirth (South Bend, IN, USA)**
- ****Female Endocrine Reactivity and Energetic Expenditure during Daily Work at High Altitude (Nubri Valley, Nepal)**
- ****Endocrine and Energetic Systems and Daily Physical Activity in Challenging Ecologies (Djoubé, Republic of the Congo)**
- **Improv and Stress (Albany, NY, USA)**
- ****Grad Student Stress and Coping (Notre Dame, IN)**

Skills & Methodologies: Extensive fieldwork in extreme environment settings; Saliva assays of testosterone and cortisol; STATA and R data analysis; managing undergraduate and graduate research; mentoring undergraduates

*** denotes in-person field research (see fieldwork/expeditionary experience)*

Undergraduate Research Assistant and Honors Thesis Student (2013-2014)

CURRICULUM VITAE

Department of Psychology, University of Michigan
Dr. Ram Mahalingam

Research project: Project examining mindfulness, creativity, emotional regulation and mental health. We specifically looked at the effects of mindfulness as a trait as well as a potential intervention tool on creativity and mental health.
Skills & Methodologies: Designed online self-report survey, conducted interviews, ran analysis on SPSS, and writing an Honors Thesis

Undergraduate Research Assistant (2013)
Department of Psychology, University of Michigan
Dr. Robin Edelstein and Dr. Brit Wardecker

Research project: Project examining attachment orientation, relationship satisfaction, and preferred communication medium. We are specifically looking at the effects of communication on the overall health of relationships between partners.
Skills & Methodologies: Assisted in study design and coded qualitative responses

Directed Research in Paleoanthropology (2013)
Paleo Anthropology Lab, University of Michigan
Dr. Milford Wolpoff and Dr. Caroline VanSickle

Research project: Project examining changes in childbirth anatomy in hominid evolution, specifically focusing on whether hip morphology differences between Neandertal and modern human females are the result of different birthing mechanisms.
Skills & Methodologies: Measured pelvises, searched and recorded indices of childbirth trauma and changes in pelvic morphology, digitized archival hand-written records

Undergraduate Research Assistant (2011-2013)
Department of Psychology, University of Michigan
Dr. Cathleen Clerkin & Dr. Fiona Lee

Research project: Project examining the relationship between women, stereotypes, and STEM fields. We are specifically looking at perceived attractiveness of potential romantic partners in both the long and short run and the varying effects of different majors.
Skills & Methodologies: Designed online self-report survey, coded open-ended survey data, ran analysis on SPSS, presented preliminary findings at APS conference, and manuscript in progress

Undergraduate Research Assistant (2011)
University of Connecticut Health Center
Dr. Minakshi Tikoo

Research project: Measured performance outcome, developed and implemented a system for reporting hospital performance outcome measures to federal, state, and local partners, and evaluated quality of care for health systems through out the state of Connecticut. Also conducted research on levels of common co-morbidities directly associated with Connecticut health systems.
Skills & Methodologies: Coded phone-survey responses to health system concerns on Excel, conducted extensive literature review regarding co-morbidities

Undergraduate Research Opportunity Program, Student Researcher (2010-2011)
University of Michigan
Dr. Fiona Lee & Dr. Cathleen Clerkin

Research project: Conducted one-year project examining the relationship between cultural intelligence, multicultural exposure, and individual creativity.
Skills & Methodologies: Coded open-ended survey data on creativity (based on Guilford's Unusual Uses coding system), conducted preliminary analysis in SPSS, presented findings at UROP conference.

FIELDWORK/EXPEDITIONARY EXPERIENCE

HI-SEAS Lunar Analog – Mauna Loa, Hawaii
Wilderness First Aid
American Rocky Mountains
Central Congo Basin, Republic of Congo
Nubri Valley, Nepal

CURRICULUM VITAE

SKILLS AND QUALIFICATIONS

Wilderness First Aid
Proficient with STATA, R, SPSS, GIS, Microsoft Office, SQL, and Qualtrics
ELISA Assays
RIA Assays
Proficient in Adobe Photoshop and Illustrator
Advanced in Microsoft Excel
Advanced budget management
IRB Human Subject Training

LANGUAGES

English (first language)
Spanish (conversant)
French (intermediate)
Hindi (beginner)

TEACHING EXPERIENCE

Instructor of Record/Teaching Assistant (SP 2018 & SP 2019)
Department of Biology, University of Notre Dame
Class: Gross Human Anatomy
Skills & Methodologies: Tasks included lecturing, grading, and dissecting specimens.

Teaching Assistant (FA 2016)
Department of Anthropology, University of Notre Dame
Class: Introduction to Anthropology
Skills & Methodologies: Tasks included lecturing, grading, developing a class project and encouraging leadership, autonomy, and innovation in students by assisting in student-led discussions.

Honors Primary Instructor (SP 2014)
Honors Department, University of Michigan
Class: Freshmen Honors Seminar "Just Another Jedi Mind Trick- The Effect of Mindfulness on Creativity, Health, and Discrimination"
Skills & Methodologies: Designed core curriculum for the class including a syllabus, weekly lesson plans, and provided the necessary resources for introductory and interactive learning for first year students discussing the relationship psychological and methodological perspectives on mindfulness. Tasks included lecturing, grading, developing a class blog and encouraging leadership, autonomy, and innovation in students by organizing student-led discussions, and independent creative projects exploring the personal mindfulness experience

AFFILIATIONS

Human Biology Association (HBA)
American Society for Space and Gravitational Research (ASGSR)
American Association for Physical Anthropologists (AAPA)
Women in Aviation (WIA)

SERVICE

2022	Human Spaceflight Virtual Networking Events, organizer and coordinator Human Spaceflight Journal Club, organizer and coordinator Evolutionary Anthropology Section News, co-editor Bioastronautics Seminar Series Organizing Committee
2021	Human Spaceflight Virtual Networking Events, organizer and coordinator Human Spaceflight Journal Club, organizer and coordinator Evolutionary Anthropology Section News, co-editor Bioastronautics Seminar Series Organizing Committee
2020	Center for Hearing and Balance Research Day Committee and Moderator

CURRICULUM VITAE

Human Spaceflight Virtual Networking Events, organizer and coordinator
Human Spaceflight Journal Club, organizer and coordinator
Evolutionary Anthropology Section News, co-editor
2019 ASGSR Student Board Member, Webmaster & Social Media Chair
Notre Dame Anthropology Biological Anthropology Hiring Committee
2018 ASGSR Student Board Member, Webmaster
2017 ASGSR Student Board Member, Community Relations Committee
Graduate Committee Representative
2016 ASGSR Student Board Member, Community Relations Committee
Graduate Committee Representative
2014 Wolverine Fit Treasurer
Indian American Student Association Cultural Show Coordinator & Executive Board Member
2013 Wolverine Fit Treasurer
America Reads Volunteer Book Club leader
Indian American Student Association Cultural Show Coordinator & Executive Board Member
Wolverine Fit Social Chair
Alternative Spring Break Site Leader
2012 Wolverine Fit Social Chair
Alternative Spring Break Site Leader
Indian American Student Association Cultural Show "Core" Committee member
2011 Indian American Student Association Cultural Show Choreographer

CURRICULUM VITAE

REFERENCES (available on request)

Dr. Mark Shelhamer, Postdoc Advisor

Dr. Lee T. Gettler, PhD Advisor

Dr. Cara Ocobock

Dr. Agustin Fuentes

Dr. James J. McKenna

Dr. Cathleen Clerkin, Undergraduate Advisor