AMY M. BODDY

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CURRICULUM VITAE

RESEARCH INTERESTS

I am a human biologist and evolutionary theorist with an interest in applying evolutionary and ecological theory to human health and disease. My work is multidisciplinary and uses a combination of genomics, comparative biology, and evolutionary theory to understand life history trade-offs between survival and reproduction across different levels of biological organization. Active research topics include (1) Comparative oncology and the evolution of cancer defenses across the tree of life; (2) Life history trade-offs in cancer, with a focus on early life adversity and cancer outcomes, and (3) Maternal-fetal conflict in maternal health, including studies on microchimerism and maternal tolerance during pregnancy, the immunology of breastfeeding, and maternal health and behavior postpartum.

PROFESSIONAL APPOINTMENTS

2021 -		Associate Professor, Department of Anthropology, University of California, Santa
		Barbara
2017 - 20	021	Assistant Professor, Department of Anthropology, University of California, Santa
		Barbara
2016 - 2	017	Assistant Research Professor, The Biodesign Institute, Arizona State University
2014 - 2	016	Postdoctoral Fellow, Arizona State University
2013 - 2	014	Postdoctoral Fellow, University of California, San Francisco

EDUCATION

Ph.D.	2006 - 13	Wayne State University - School of Medicine, Molecular Biology & Genetics

B.S. 2003 - 05 Wayne State University, Biology

A.A. 2000 - 03 Macomb Community College, Liberal Arts

AFFILIATED MEMBERSHIP

2022 -	Center for Aging and Longevity, University of California, Santa Barbara
2018 -	Broom Center for Demography, University of California, Santa Barbara
2018 - 2023	Arizona Cancer and Evolution (ACE) Center, Co-leader
2015 - 2017	Center for Evolution and Medicine, Arizona State University
2013 - 2015	Center for Evolution and Cancer, University of California San Francisco
2013 - 2014	Guest in the Cancer Evolution Work Group at The Institute for Advanced Study in Berlin
	(Wissenschaftskolleg)

FELLOWSHIPS

- 2012 Wayne State University Provost Fellowship for Computational Biology
- 2011 Wayne State University Provost Fellowship for Computational Biology

ACADEMIC HONORS & AWARDS

2024-2026 Pahl Scholar Award, The Pahl Center for the Study of Critical Social Issues. From Disbelief to Trust: Examining Prenatal Care Practices to Eliminate Medical Gaslighting (\$50,000) 2023 Distinguished Faculty Teaching Award, University of California, Santa Barbara

- 2020 UCSB Faculty Career Development Award. Maternal-Fetal Crosstalks: Investigating the Role of Maternal Immune Tolerance and Fetal Microchimerism in Maternal Health and Disease. \$7,500 Summer Salary Support. Boddy is Pl. 2020.
- 2020 Nominee Packard Fellowship, University of California, Santa Barbara
- 2018 Nominee Pew Biomedical Scholars, University of California, Santa Barbara
- 2016 Postdoctoral Award Finalist Human Behavior and Evolution Society
- 2015 Postdoctoral Award Finalist Human Behavior and Evolution Society
- 2009 Wayne State University School of Medicine Travel Award
- 2008 Summer Institute in Statistical Genetics University of Washington Travel Award
- 2007 Cold Spring Harbor Travel Award: Clinical Cardiovascular Genomics Conference
- 2005 Graduated Cum Laude with B.S. from Wayne State University

SUBMITTED/PREPRINT PUBLICATIONS

- In Prep Hove C, Gurven M, Trumble B, Stieglitz J, Rodriguez DE, Suarez IM, Kaplan H, **Boddy AM***, Blackwell AD*. Female reproductive state and ecological conditions impact the magnitude of sex differences in immune stats across the lifespan. *co-senior author
- Preprint Kapsetaki SE, Compton ZT, Rupp SM, Duke EG, **Boddy AM**, Harrison TM, Aktipis A, Maley CC. <u>The</u> <u>ecology of cancer prevalence across species: Cancer prevalence is highest in desert species and high</u> <u>tropic levels</u>.
- Preprint Kapsetaki SE, Basile AJ, Compton ZT, Rupp SM, Duke EG, **Boddy AM**, Harrison TM, Sweazea KL, Maley CC. <u>The relationship between diet, plasma glucose, and cancer prevalence across vertebrates</u>
- Submitted Seyedi S, Harris VK, Kapsetaki SE, Saha D, Compton Z, Yousefi R, May A, Fakir E, Boddy AM, Gerlinger M, Wu C, Mina L, Huijben S, Gouge DH, Cisneros L, Ellsworth PC, Maley CC. Cancer Research. 2024 <u>Resistance management for cancer: Lessons from farmers</u>.
- ^{Submitted} Parmeggiani C, Sallinger K, Cleaves II HJ, **Boddy AM**. Microchimerism and cancer: A review and evolutionary perspective. Seminars in Immunopathology. 2024
- ^{Submitted} **Boddy AM** and Ågren JA. Clinical implications of the paradox of the organism. Edited volume Paradox of the Organisms. Eds: Manus Patten, Arvid J Ågren. 2024
- Submitted Minias, P, Corthay A, Colchero F, Lemaître JF, Maille L, Conde D, Pavard S, Dujon A, Ujvari B, Thomas F, Boddy AM, Maley CC, Chevallier D, Sepp T, Pradea T, Giraudeau M. Immunological surveillance against cancer. 2024

PEER-REVIEWED PUBLICATIONS

- 39. Compton Z, Harris V, Mellon W, Rupp S, Kapsetaki SE, Wilmot M, Kennington R, Noble K, Baciu C, Ramirez L, Peraza A, Martins B, Sushil S, Aksoy S, Furukawa, Vincze O, Giraudeau M, Duke EG, Spiro S, Flach E, Davidson H, Zehnder A, Graham TA, Troan B, Harrison TM*, Tollis M*, Schiffman JD*, Aktipis A*, Abegglen LM*, Maley CC*, Boddy AM*. Cancer prevalence across vertebrates. Cancer Discovery (2024) *Co-senior authors
- 38. Kapsetaki SE, Compton ZT, Mellon W, Vincze O, Giraudeau MT, Harrison TM, Abegglen LM, Boddy AM, Maley CC, Schiffman JD. <u>Germline mutation rate predicts cancer mortality across 37 vertebrate</u> <u>species</u>. EMPH (2024) eoae016
- 37. Kapsetaki SE, Compton ZT, Dolan J, Harris VK, Mellon W, Rupp SM, Duke EG, Harrison TM, Aksoy S, Giraudeau M, Vincze O, McGraw KJ, Aktipis A, Tollis M, Boddy AM*, Maley CC*. <u>Life history traits</u> and cancer prevalence in birds. EMPH (2024) 12(1), 105-116. *Co-senior authors
- 36. Giraudeau M, Vincze O, Dupont S, Seep T, Baines C, Lemaitre JF, Lemberger K, Gentes S, **Boddy AM**, Dujon AM, Bramwell G, Harris V, Ujvari B, Alix-Panabieres C, Lair S, Sayag D, Conde DA, Colchero

F, Harrison TM, Pavard S, Padilla-Morales B, Chevallier D, Hamede R, Roche B, Malkocs T, Aktipis A, Maley C, DeGregori J, Le Loc'h G, Thomas F. <u>Approaches and methods to study wildlife cancer</u>. J Anim Ecol. (2024) 00:1–19.

- 35. Willig F, Torpy FJ, Harrison SH, Duke EG, Troan B, **Boddy AM**, Abegglen LM, Harrison TM. <u>Evaluation of Neoplasia, Treatments and Survival in Lizard Species</u>. Animals (2024) 7;14(10):1395
- 34. Hove CM, Chua KJ, Martin MA, Hubble M, **Boddy AM**. <u>Variation in maternal lactation practices associated</u> with changes in diurnal maternal inflammation. Scientific Reports (2024) 14(1), 4376
- 33. Ferraro E, Harrison SH, Duke E, Troan B, **Boddy AM**, Abegglen LM, Harrison T M, <u>Retrospective study of</u> <u>the prevalence, histopathology, therapy, and survival time of neoplastic disease in fish.</u> Animals 14.3 (2024): 464
- 32. Sengupta, J, Kroneis T, **Boddy AM**, Roy R, Sarkar A, Sarkar D, Ghosh D, Huppertz B. <u>Sperm intrusion into</u> the implantation-stage blastocyst and its potential biological significance. EMPH. 2024. 12(1), 1-6
- 31. Kapsetaki SE, Fortunato A, Compton Z, Rupp SM, Nour Z, Riggs-Davis S, Stephenson D, Duke EG, Boddy AM, Harrison T M, Maley CC, Aktipis A. <u>Is chimerism associated with cancer across the tree of life?</u> PloS one 18.6 (2023): e0287901
- 30. AbdulJabbar K, Castillo SP, Hughes K, Davidson H, **Boddy AM**, Abegglen LM, Murchison EP, Graham TA, Spiro S, Palmieri C, Yuan Y. <u>Bridging clinic and wildlife care with Al-powered pan-species computational pathology</u>. Nature Communications. 14.1 (2023): 2408.
- 29. Boddy AM, Rupp S, Yu Z, Hanson H, Aktipis A, Smith K. <u>Early life adversity, reproductive history, and breast cancer risk</u>. Evolution, Medicine and Public Health. 10.1 (2022): 429-438.
- 28. Abegglen LM, Harrison TM, Moresco A, Fowles JS, Troan BV, Kiso WK, Schmitt D, **Boddy AM**, Schiffman JD. <u>Of elephants and other mammals: A comparative review of reproductive tumors and potential impact on conservation</u>. Animals. (2022): 12(15), 2005.
- 27. Dujon AM, Boutry J, Tissot S, Lemaitre JF, Boddy AM, Gerard A, Alvergne A, Arnal A, Vincze O, Nicolas D, Giraudeau M, Telonis-Scott M, Schultz A, Pujol P, Biro P, Beckmann C, Hamede R, Roche B, Ujvari B, Thomas F. <u>Cancer susceptibility as a cost of reproduction and contributor to life history evolution</u>. Frontiers in Ecology and Evolution. 10 (2022): 861103.
- 26. Natterson-Horowitz B, **Boddy AM**, Zimmerman, D. <u>Female Health Across the Tree of Life: Insights at the Intersection of Women's Health, One Health and Planetary Health</u>. PNAS nexus 1.2 (2022): pgac044.
- 25. Vincze O, Colchero F, Lemaitre JF, Conde D, Pavard S, Bieuville M, Urrutia AO, Ujvari B, **Boddy AM**, Maley CC, Thomas F, Giraudeau M. <u>Cancer risk across mammals</u>. Nature. 601.7892 (2022): 263-267.
- 24. Tollis M, Ferris E, Campbell M, Harris V, Rupp S, Harrison T, Kiso WK, Schmitt D, Aktipis A, Maley C, Boddy AM, Yandell M, Sciffman JD, Abegglen LM. <u>Elephant genome reveal accelerated evolution in</u> <u>mechanisms underlying disease defenses</u>. Molecular Biology and Evolution. 38.9 (2021): 3606-3620.
- 23. Ujvari B, Dujon A, Aktipis A, Alix-Panabières C, Amend S, Boddy AM, Brown J, Capp JP, DeGregori J, Ewald P, Gatenby R, Gerlinger M, Giraudeau M, Hamede R, Hansen E, Kareva I, Maley CC, Marusyk A, McGranahan N, Metzger M, Nedelcu A, Noble R, Nunney L, Pienta K, Polyak K, Pujol P, Read A, Roche B, Sebens S, Solary E, Stanková K, Thomas F, Ewald HS. <u>Identifying key questions in the ecology</u> and evolution of cancer. Evolutionary applications 14.4 (2021): 877-892.
- 22. Gunst A, Sudén M, Korja R, **Boddy AM**, Kotler J, Paavonen EJ, Karlsson L, Karlsson H, Antfolk J. <u>Postpartum</u> <u>depression and mother-offspring conflict over maternal investment</u>. Evolution, Medicine and Public Health. 9.1 (2021): 11-23.
- 21. Boddy AM, Harrison T, Abegglen LM. <u>Comparative Oncology: New Insights into an ancient disease</u>. Iscience. (2020): 101373.

- 20. Boddy AM, Abegglen LM, Pessier AP, Schiffman JD, Maley CC, Witte C. Lifetime cancer prevalence and life history traits in mammals. Evolution, Medicine and Public Health. (2020): 187-195.
- 19. Campenni M, May AN, **Boddy AM**, Harris V, Nedelcu AM. <u>Agent-based modelling reveals strategies to</u> <u>reduce the fitness and metastatic potential of circulating tumour cell clusters</u>. Evolutionary Applications. March 2020. 13.7 (2020): 1635-1650.
- Somarelli JA, Boddy AM, Gardner H, Bartholf DeWitt S, Tuyohy J, Megquier K, Sheth MU, Hsu D, Thorne JL, Eward WC. <u>Improving cancer drug discovery by studying cancer across the tree of life</u>. Molecular Biology and Evolution 37.1 (2020): 11-17.
- Somarelli JA, Gardner H, Cannataro VL, Gunady EF, Boddy AM, Johnson NA, Fisk JN, Gaffney SG, Chuang JH, Li S, Ciccarelli FD. <u>Molecular biology and evolution of cancer: from discovery to action</u>. Molecular Biology and Evolution, 2020. 37(2), 320-326.
- Aktipis A, Cronk L, Alcock J, Ayers JD, Baciu C, Balliet D, Boddy AM, Curry OS, Krems JA Muñoz A, Sullivan D. <u>Understanding cooperation through fitness interdependence</u>. Nature Human Behaviour. 2018 Jul;2(7):429.
- 15. Maley CC, Aktipis A, Graham TA, Sottoriva A, Boddy AM, Janiszewska M, Silva AS, Gerlinger M, Yuan Y, Pienta KJ, Anderson KS, Gatenby R, Swanton C, Posada D, Wu Cl, Schiffman JD, Hwang ES, Polyak K, Anderson ARA, Brown JS, Greaves M, Shibata D. <u>Classifying the evolutionary and ecological features of neoplasms</u>. Nature Reviews Cancer. 2017. 17.10:605-619
- Boddy AM, Montgomery SH, Harrison PW, Caravas JA, Raghanti MA, Phillips KA, Mundy NI, Wildman DE. <u>Evidence of a conserved molecular response to selection for increase brain size in primates</u>. Genome biology and evolution 9 (3). 2017.
- 13. Diaz-Munoz S, **Boddy AM**, Dantas G, Waters CM, and Bronstein JL. <u>Contextual organismality: beyond</u> pattern to process in the emergence of organisms. Evolution. 70.12 (2016): 2669-2677
- 12. Hidaka, Brandon H, and **Boddy AM**. <u>Is estrogen receptor negative breast cancer risk associated with a fast</u> <u>life history strategy?</u> Evolution, medicine, and public health. 2016. 17-20
- 11. Boddy AM, Fortunato A, Wilson Sayres M, Aktipis A. <u>Fetal microchimerism and maternal health: A review</u> <u>and evolutionary analysis of cooperation and conflict beyond the womb</u>. Bioessays. 2015. Oct 1;37(10):1106-18.
- 10. Boddy AM, Kokko H, Breden F, Wilkinson GS, Aktipis CA. <u>Cancer susceptibility and reproductive trade-offs: a model of the evolution of cancer defences</u>. Phil. Trans. R. Soc. B. 2015. 20140220.
- 9. Aktipis CA, **Boddy AM**, Jansen G, Hibner U, Hochberg ME, Maley CC, Wilkinson GS. <u>Cancer across the</u> <u>tree of life: cooperation and cheating in multicellularity</u>. Phil. Trans. R. Soc. B. 2015: 20140219.
- 8. Aktipis CA, **Boddy AM**, Gatenby RA, Brown JS, Maley CC. <u>Life history tradeoffs in cancer evolution</u>. Nat Rev Cancer. 2013. 13(12):883-92.
- Sterner KN, McGowen M, Chugani H, Tarca A, Sherwood CC, Hof PR, Kuzawa, CW, Boddy AM, Raaum RL, Weckle A, Lipovich L, Grossman LI, Uddin M, Goodman M, Wildman DE. <u>Characterization of</u> <u>human cortical gene expression in relation to glucose utilization</u>. Am J Hum Biol. 2013. 25(3):418-30.
- 6. Sterner KN, Chugani HT, Tarca AL, Sherwood CC, Hof PR, Kuzawa CW, Boddy AM, Raaum RL, Weckle A, Gregoire L, Lipovich L, Grossman LI, Uddin M, Goodman M, Wildman DE. <u>Dynamic gene expression in the human cerebral cortex distinguishes children from adults</u>. PLoS ONE. 2012. 7(5):e37714.
- 5. Boddy AM, McGowen MR, Sherwood CC, Grossman LI, Goodman M, Wildman DE. <u>Comparative analysis</u> of encephalization in mammals reveals relaxed constraints on anthropoid primate and cetacean brain scaling. J Evol Biol, 2012. 21(10):981-94277.

- 4. Hinterseher I, Erdman R, Donoso LA, Vrabec TR, Schworer CM, Lillvis JH, Boddy AM, Derr K, Golden A, Bowen WD, Gatalica Z, Tapinos N, Elmore JR, Franklin DP, Gray JL, Garvin RP, Gerhard GS, Carey DJ, Tromp G, Kuivaniemi H. <u>The role of complement cascade in abdominal aortic aneurysms</u>. Arterioscler Thromb Vasc Biol. 2011. 31(7):1653-60.
- Sherwood CC, Raghanti MA, Stimpson CD, Spocter MA, Uddin M, Boddy AM, Wildman DE, Bonar CJ, Lewandowski AH, Philips KA, Erwin JM, Hof PR. <u>Inhibitory interneurons of the human prefrontal</u> <u>cortex display conserved evolution of the phenotype and related genes</u>. Proc. R. Soc. B, 2010. 277(1684):1011-20.
- 2. Elmore JR, Obmann MA, Kuivaniemi H, Tromp G, Gerhard GS, Franklin DP, **Boddy AM**, Carey DJ. <u>Identification of a genetic variant associated with abdominal aortic aneurysms on chromosome 3p12.3</u> <u>by genome wide association.</u> J Vasc Surg. 2009. 49:1525-31.
- 1. Boddy AM, Lenk GM, Lillvis JH, Nischan J, Kyo Y, Kuivaniemi H. <u>Basic research studies to understand</u> <u>aneurysm disease</u>. Drug News and Perspectives. 2008. 21(3):142-8.

BOOK CHAPTERS AND OTHER CONTRIBUTIONS

- 11. Boddy AM. The need for evolutionary theory in cancer research. European Journal of Epidemiology (2022). 1-6.
- Marques C, Compton Z, Boddy AM. <u>Connecting paleopathology and evolutionary medicine to cancer</u> <u>research: past and present.</u> Evolving Health: Paleopathology and Evolutionary Medicine: An Integrated Approach, Oxford University Press. 2022. 239.
- Boddy AM, Abegglen LM, Aktipis A, Schiffman JD, Maley CC, Witte C. <u>Does placental invasiveness lead to</u> <u>higher rates of malignant transformation in mammals?</u> Evolution, Medicine and Public Health. (2020): 215-216.
- Boddy AM, Huang W, Aktipis A. Life History Trade-offs in Tumors. Current PathoBiology Reports. 2018. 6:201-207.
- 7. Tollis M, **Boddy AM**, Maley CC. <u>Peto's paradox: how evolution solved the problem of cancer prevention</u>. BMC Biology. 201715 (1) 60.
- 6. Tollis M, Schiffman JD, **Boddy AM**. <u>Evolution of cancer suppression as revealed by comparative genomics</u>. Current Opinion in Genetics & Development 42 (2017): 40-47
- 5. Harris VK, Schiffman JD, **Boddy AM**. <u>Evolution of cancer defense mechanisms across species. In: The Ecology</u> <u>and Evolution of Cancer</u>. Eds: Ujvari, Roche, Thomas. Elsevier. 2017.
- 4. Fortunato A, **Boddy AM**, Mallo D, Aktipis A, Maley CC, Pepper JW. <u>Natural Selection in Cancer Biology:</u> <u>From molecular snowflakes to trait hallmarks</u>. CSH Perspectives in Medicine. 7 (2) 2017.
- 3. Chowell D, Boddy AM, Mallo D, Tollis M, Maley CC. <u>When (distant) relatives stay too long: implications</u> for cancer medicine. Genome biology. 2016. Feb 24;17(1):1.
- Nischan J, Lenk GM, Boddy AM, Lillvis JH, Tromp G, Kuivaniemi H. Abdominal aortic aneurysms a complex genetic disease. In: Aneurysms: Types, Risks, Formation and Treatment, Nova Science Publishers, Inc., Hauppauge, NY. E Morel E and Laurent A, eds. 2009.
- Kuivaniemi H, Boddy AM, Lillvis JH, Nischan J, Lenk GM, Tromp G. Abdominal aortic aneurysms are deep, deadly and genetic. In: Aortic Aneurysms, New insights into an old problem. Liege University Press, Liege, Belgium. Sakalihasan N, Kuivaniemi H, and Michel JB, eds. 2008; 299-323.

ACTIVE GRANTS/FUNDING

- 2. John Templeton Foundation: <u>We All Are Multitudes: the Microchimerism, Human Health and Evolution</u> <u>Project.</u> \$5,339,697 total. Boddy is Co-leader; \$1,099,188 total to UCSB. 2021-2026. Grant ID: 62214
- 1. Interdisciplinary Humanities Center for the IHC Faculty Collaborative Award, University of California Santa Barbara. <u>Art Loves Science, Science Loves Art a Reproductive Biology Showcase</u>, 2023-2024. \$500.

SUBMITTED GRANTS/FUNDING

1. NIH P01: Discovery of Cancer Resistance Mechanisms Across Species, \$8,494,228 total direct. Boddy is Co-PI. \$272,920 total direct to UCSB. 2024-2029. Pending

COMPLETED GRANTS/FUNDING

- 14. NIH U54: ACE Pilot Funding. Of pan-species histology and macroecology: chasing a solution to Peto's paradox across mammals. Boddy is Co-I. \$12,000 total direct. 2021-2022.
- 13. NIH U54: ACE Pilot Funding. Oncogenic mutational signatures in cancer-like phenotypes in Acropora. Boddy is Co-I. \$14,680 total direct. 2021-2022.
- 12. NIH U54: ACE Pilot Funding. Molecular evolution of immunity, reproduction and cancer genes in crocodilians. Boddy is Co-PI. \$13,500 total direct. 2021-2022.
- 11. NIH U54: ACE Pilot Funding. Molecular evolution of immunity, reproduction and cancer genes in crocodilians. Boddy is Co-Pl. \$13,500 total direct. 2021-2022.
- 10. NIH U54: ACE Pilot Funding. Prevalence of reproductive cancers in nonhuman primates. Boddy is Co-PI. \$7,350 total direct. 2021-2022.
- 9. NIH U54: Arizona Cancer Evolution Center. Applying models of evolution to cancer across scales, from species down to cells. \$7,500,000 total direct. Boddy is Co-Leader Project 1. \$263,024 total directs to UCSB. 2018-2023.
- 8. National Science Foundation. Graduate Research Fellowship Program. *Pregnancy-induced inflammation and obstacles to breastfeeding success in an industrialized environment.* \$30,934 total direct. Boddy is Co-PI with student Carmen Hové. 2019-2021.
- 7. University of California Santa Barbara, Academic Senate Grant. The functional role of fetal microchimerism in maternal health. \$11,513 total direct. Boddy is Pl. 2020
- 6. NIH U54: Administrative Supplement. *Characterization of Elephant Tumor Evolution*. \$38,180 total direct. Boddy is Co-Pl. 2019-2020.
- 5. NIH U54: ACE Pilot Funding. *Phenotypic and Genomic Responses to DNA Damage in Crocodilians*. Boddy is Co-Pl. \$8,000 total direct. 2019-2020.
- 4. NIH U54: ACE Pilot Funding. Somatic Mutations in Tumors from Wild African Elephants. Boddy is Co-PI. \$25,155 total direct. 2019-2020.
- 3. University of California Cancer Research Coordinating Committee. *Think Biology: Healthy teen lifestyles and cancer prevention.* Boddy is Co-I. \$66,941 total direct. 2019-2020.
- 2. NIH U54 ACE Pilot Funding. WCON: Wildlife Cancer Observation Network. Boddy is Co-PI. \$12,000 total direct. 2018-2019

1. NIH U54 ACE Pilot Funding. Cancer Prevalence and Neoplastic Cell Evolution in Nonhuman animals. Boddy is Co-Pl. \$39,440 total direct. 2018-2019

COMMITTEES/SERVICE

- 2018 -present Board Member, International Society for Evolution, Ecology, and Cancer
- 2018 -present Board Member, Science Ambassador Scholarship, Cards Against Humanity
- 2020 -present Board Member, Exotic Species Cancer Research Alliance
- 2024 Faculty Organizer, California Workshop on Evolutionary Social Sciences, May 3-4, Santa Barbara, CA
- 2022 Program Committee, International Society for Evolution, Medicine and Public Health, July 5 – 8, 2022. Lisbon, Portugal
- 2022 Scientific Program Committee, Evolutionary Biology and Ecology of Cancer Summer School, Wellcome Connecting Science, June 13-17, 2022. Hinxton, United Kingdom
- 2020* Scientific Program Committee, Évolutionary Biology and Ecology of Cancer Summer School, Wellcome Genome Campus, June 29-July 3, 2020. *cancelled due to COVID19
- 2019 Invited participant, Workshop on strategic planning "Comparative Genomics and Evolution" NHGRI/NSF, Bethesda, MD August 16-17.
- 2017 Co-Organizer, International Society for Evolution, Ecology, and Cancer, Arizona State University, Tempe, AZ
- 2015 Co-Organizer, Third Biannual Evolution and Cancer Conference, University of California San Francisco
- 2013 Co-Organizer, Second Biannual Evolution and Cancer Conference, University of California San Francisco
- 2010 Chair, Graduate Student Research Day, Wayne State University School of Medicine
- 2009 Sponsorship Committee, Graduate Student Research Day, Wayne State University School of Medicine
- 2009 Summer Undergraduate Research Director, Wayne State University School of Medicine
- 2008-09 Co-Chair, Summer Undergraduate Research Program, Wayne State University School of Medicine

TEACHING

Anth 250AB	Professional Development (Spring 2024)
Anth 203	Race, Racism and Anti-Racism (Spring 2022, 2023)
Anth 150	Human Genetics, UCSB (Fall 2019, Winter 2022, Winter 2024)
Anth 177AB	Reproductive Ecology and Endocrinology, UCSB (Fall 2018, Winter 2021, Winter 2023)
Anth 171	Evolutionary Medicine, UCSB (Winter 2018, 2019, 2020, Spring 2021, 2022, 2023, 2024)
Anth 9	Human Behavioral Sciences and Methods, UCSB (Spring 2018, Fall 2020, 2021)
Anth 250A	Graduate Seminar: Advanced Topics in Evolutionary Medicine, UCSB (Spring 2018, Fall 2021)
Anth 241A	Findings in BioAnth, UCSB (Fall 2019, Winter 2020, Fall 2021, Winter 2021, Spring 2021)
Lecturer	Comparative Methods: Evolutionary Biology and Ecology of Cancer, Wellcome Genome
	Campus (Summer 2016, 2018, 2020*) *cancelled due to COVID19
Bio 494/591	The Evolution and Ecology of Cancer, Arizona State University
	Winter 2016, Teaching Assistant

MENTORSHIP

Postdoctoral Scholars

2022-	Kristine Chua, Anthropology, University of California Santa Barbara
2019-2022	Tiffany Pan, Anthropology, University of California Santa Barbara

Primary Advisor - Graduate

2023-	Janine Klein, Anthropology, University of California Santa Barbara
2022	<u>MA Project:</u> Primate nearth and Denavior
2022-	Cristiano Parmeggiani, Anthropology, University of California Santa Barbara
	<u>MA Project</u> : Placenta evolution and cancer prevalence across mammals
2019 -2022	Maya Szafraniec, Anthropology, University of California Santa Barbara
	<u>MA Project:</u> Maternal-fetal conflict and placentation
2018-2022	Carmen Hove, Anthropology, University of California Santa Barbara
	PhD Project: Pregnancy-induced inflammation and obstacles to breastfeeding success in
	an industrialized environment
<u>Research Lec</u>	hnician
2022-2023	Nikki Torno, University of California Santa Barbara
	<u>Project:</u> Lab technician for the microchimerism study
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Primary Advis	<u>or – Undergraduate Interns*</u>
*Research assistant	is supported by external funds, UKCA Grant denotes student received UCSB funding for project
2023-	Brynn Shapiro, University of California Santa Barbara
	Project: Characterization of fetal microchimerism in maternal blood
2022-2024	Emilie Risha, University of California Santa Barbara, URCA Grant
	Project: Characterization of fetal microchimerism in maternal blood
2020-2023	Mary Boyd, University of California Santa Barbara
	Project: Cancer Across Animals in the London Zoo
2020-2022	Olivia Mendoza, University of California Santa Barbara
	Project: Cancer Across Animals in the London Zoo
2018-2020	Kenna Sherman, College of Creative Studies, University of California Santa Barbara
	Project: Comparative oncology and comparative genomics in mammals
2017-2019	Sydney Collier, Anthropology, University of California Santa Barbara
	Project: Comparative oncology in the Santa Barbara Zoo
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URCA Grant de	or <u>or order graduale research rojects</u>
2023-2024	Anastasia Senavsky, University of California Santa Barbara, URCA Grant
	Project: Art Loves Science: A showcase on reproductive biology
2022-2023	Cassidye Devers. University of California Santa Barbara
	Project: Medicine or poison in Ancient Rome
2022-2023	Advika Verma University of California Santa Barbara
	Project: Cross cultural comparisons of BMI
2022	Mekila Nevens, University of California Santa Barbara
LOLL	Project: Effects of early life stress in females and males
2022	Amy Lam University of California Santa Barbara
2022	Project: Characterization of fetal microchimerism throughout pregnancy
2022	Ashley Willis University of California Santa Barbara LIRCA Grant
	Project: Placentation and Neoplacia: A life history exploration of evolved disease defenses
2020 2021	Caitlin Fitznatrick Anthropology Llniversity of California Santa Barbara
2020-2021	Project: Culture practices that reduce viral transmission
2019 2020	Ammar Campwala, Anthropology, University of California Santa Barbara
2017-2020	Project: Cancer risk in the vulnerable homeless population in Santa Barbara
2018-2019	Roijn Aghamohammadi Honors Thesis Anthropology Lloivenity of California Santa Barbara
2010-2017	Project: A cross-cultural review of fetal alcohol syndrome
2015-2014	William Walker Barrett Honors College Arizona State University Honors Faculty
2013-2010	Project: Epidemiology of concer in primates
	<u>ה הסופרנ</u> . במוספר ווסוסצע סן כמוכפר וה מוחמנפג

2008-2009	Disha Bora, High-school research mentor, Detroit Country High School
	<u>Project</u> : SNPs associated with abdominal aortic aneurysms

Committee Mer	<u>mber – Graduate</u>
2024-	Vahid Nikoonejad Fard, School of Informatics, Computing and Cyber-Systems, Northern
	Arizona University
	PHD Project: Genomic insights into cancer prevalence across mammals
2023-	Yoann Buoro, Department of Anthropology, University of California Santa Barbara
	MA Project: TBA
2023-	Emily Cobb, Department of Anthropology, University of California Santa Barbara
	MA Project: TBA
2021-2023	Zhian Chen, Department of Anthropology, University of California Santa Barbara
	MA Project: Underestimation of peer support for women's empowerment
	reinforces inequitable gender norms among Tanzanian men
2021-2023	Hannah Frogge, Department of Anthropology, University of California Santa Barbara
	MA Project: Constraints on population growth of blue monkeys (Cercopithecus mitis) in
	Kibale National Park, Uganda
2020-2021	Joseph Kilgallen, Department of Anthropology, University of California Santa Barbara
	MA Project: Positive correlation between women's status and intimate partner violence
	suggest violence backlash in Mwanza, Tanzania
2020-2022	Ashley Peraza, Arizona State University
	MA Project: Trends in tissue specific cancer
2020-	Brittney Holguin, Department of Anthropology, University of California Santa Barbara
	PhD Project: TBD
	MA Project: External auditory exostoses and their relationship to aquatic activities on
	California's Northern Channel Islands; Completed 2021
2019-2022	Jessica Ayers, Psychology, Arizona State University
	PhD Project: Maternal-fetal conflict and behavior
2019-2021	Ronnie Steinitz, Anthropology, University of California Santa Barbara
	MA Project: Primate feeding ecology, Completed 2021
2017-2022	Amy Anderson, Department of Anthropology, University of California, Santa Barbara
	PhD Project: Skeletal indicators of early stress; MA Completed 2018
2017-2022	Valerie Harris, Biodesign Institute, Arizona State University
	PhD Project: Cancer prevalence across vertebrates
Committee Mer	<u>mber – Undergraduate</u>
2021-2022	Selin Aksoy, Barrett Honors College, Arizona State University
	Project: Scaling of tissue size and cancer risk across species
2021-2022	Harshini Darapu, Barrett Honors College, Arizona State University
	Project: Reproductive cancer prevalence across mammalian species
2020-2021	Shannon Austin, Barrett Honors College, Arizona State University
	Project: Potential cancer suppression mechanisms in Ruminants
2020-2021	Morgan Fox, Barrett Honors College, Arizona State University
	Project: Multivariate analysis of life history traits across species and cancer prevalence
2019-2020	Komal Majhail, Barrett Honors College, Arizona State University
	Project: Mammary cancer across mammals
2018-2019	Jordyn Dolan, Barrett Honors College, Arizona State University
	<u>Project</u> : A survey of cancer prevalence within birds (the clave Aves)

PLENARY/KEYNOTE LECTURES

2024	Comparative Perinatal Biology, Center for Perinatal Discovery, University of California San
	Diego
	Keynote: Leveraging evolution and comparative biology for maternal health
2024	Cancer Evolution: From Genome to Ecology, Wellcome Genome Campus, UK
	<u>Plenary:</u> Evolutionary compromises: Exploring cancer in the animal kingdom
2024	Darwin Day Invited Speaker, Integrative Biology, University of South Florida
	Plenary: Adapting to adversity: Exploring cancer in the animal kingdom
2022	Paradox of the Organism Revisited, Georgetown University, Washington DC
	<u>Plenary:</u> We are multitudes: microchimerism, evolution and human health
2022	Systems Approaches to Cancer Biology, Marine Biological Laboratory, Woods Hole, MA
	<u>Plenary:</u> Cancer defense across the tree of life
2020*	Cells to Self, Exploratorium, San Francisco, CA
	Plenary: Cells from another self *cancelled due to COVID19
2018	Zombie Apocalypse Medicine Meeting, Arizona State University, Tempe, AZ
	Plenary: Is your mom a zombie? The evolutionary implications of fetal
	microchimerism

INVITED LECTURES

2023	Center for Perinatal Discovery, UC San Diego
	Talk: An evolutionary perspective on maternal health and disease
2022	CSUN Biology Colloquium, California State University, Northridge, Virtual
	<u>Talk:</u> Life history trade-offs in cancer
2022	UNLV Anthropology Proseminar, University of Nevada, Las Vegas, Virtual
	<u>Talk:</u> Life history trade-offs in cancer
2021	CEMinar, Center for Evolution and Medicine, Arizona State University, Virtual
	<u>Talk:</u> An evolutionary perspective on maternal health and disease
2021	OCEAN Speaker Series, Oklahoma State University, Virtual
	<u>Talk</u> : Life history trade-offs in reproduction and cancer
2020	Club EvMed, International Society for Evolution, Medicine and Public Health, Virtual
	<u>Talk</u> : Cancer prevalence and life history traits in mammals
2020	UCLA Department of Medicine Grand Rounds, Darwin Day Lecture, Los Angeles, CA
	<u>Talk</u> : Cancer across the tree of life: New insights into an ancient disease
2020	Cancer and Embryo Development, Arizona State University, Tempe AZ
	Talk: Life history and cancer
2019	Anthropology Colloquium, University of Oregon, Eugene OR
	<u>I alk:</u> Life history trade-offs in reproduction and cancer
2019	The Molecular Biology and Evolution of Cancer, SMBE Satellite, Yale School of Public
	Health, New Haven, CT
2010	<u>Lalk:</u> Evolution of cancer defenses
2018	Perspectives on Human Brain Evolution, Harvard Medical School, Boston, MA
	<u>I alk</u> : Insight into human brain evolution through phylogenetic analysis and
2010	CONTRACTOR SECONDER
2018	GRITIAK, UCOB
2010	<u>Taik</u> . Cancer across the tree of life: New Insights into an ancient disease
2010	Talk: Life birtony trade offs in reproduction and cancer
2018	Anthropology Colloquium University of California Davis Davis California USA
2010	Talk: Life bistory trade-offs in reproduction and cancer
2018	Understanding Cancer Through Evolutionary Game Theory Leiden Netherlands
2010	Talk: Life history trade-offs and cancer

2017	BROOM Center Seminar, UCSB, Santa Barbara, CA
2017	<u>Taik</u> : Life history trade-ons and cancer Cooperation & Conflict Symposium, Tempe, AZ
	<u>Talk</u> : Cooperation and Conflict in Maternal Health
2016	University of New Mexico, Albuquerque, NM
	<u>Talk</u> : Cooperation and Conflict Beyond the Womb
2015	Life History Theory & Telomere Dynamics, Drymen, UK
	Talk: Cancer and the evolution of multicellularity
2015	American College of Veterinary Surgeons Summit, Nashville, TN
	Talk: Cancer across life: Cancer susceptibility and the evolution of multicellularity
2014	School of Biological, Biomedical, and Environmental Sciences, University of Hull, Hull,
	United Kingdom
	Talk: Tradeoffs and Cancer

CONFERENCE PRESENTATIONS

2024	American Association of Biological Anthropologist (AABA), Los Angeles CA
	Panel Organizer and Speaker: Microchimerism and human health: Bridging the gaps
	between anthropology and medicine
	Talk: Exploring placenta evolution: Insights into placenta morphology, life history
	traits, and cancer (presented by: Cristiano Parmeggiani)
2024	California Workshop on Evolutionary Social Sciences, Santa Barbara, CA
	Talk: Cancer prevalence in non-human primates: Evidence in support of Peto's
	Paradox (Presented by: Janine Rose Klein)
	<u>I alk:</u> Is cancer in mammals linked to the evolution of the placenta? An evolutionary medicine perspective (Presented by: Cristiano Parmeggiani)
	*Poster: Challenges to studying preterm birth when using a comparative approach
	(Presented by: Aastha Kashyap, Brynn Shapiro, Carrie Guzis)
	*Undergrad poster award
2024	Cottage Health Research Symposium, Ritz-Carlton Bacara, Santa Barbara, CA
	Talk: Progress report: Immune regulation and maternal-fetal health study
2023	Society for Molecular Biology and Evolution (SMBE), Ferrara, Italy
	Poster: Does maternal-fetal conflict explain the variation in cancer rates across
	mammals? (Presented by: Cristiano Parmeggani)
	*Poster: The diversity of placenta invasiveness in mammals and the relationship
	between placenta invasiveness and cancer risk (Presented by: Mary Boyd)
	*Undergrad poster award
2023	California Workshop on Evolutionary Social Sciences, Fullerton, CA
	Poster: Relationship of placental invasiveness and interdigitation with cancer
	prevalence across species (Presented by: Cristiano Parmeggani)
2022	Evolution, Ecology and Evolutionary Biology Symposium, Ankara Turkey
	<u>Talk:</u> Body size relates to the level of cancer suppression across non-human primates
	(Presented by: E. Yagmur Erten)
2022	American Society of Primatologist, Denver, CO
	Poster: Reproductive neoplasia in female western lowland gorillas (Gorilla gorilla
	gorilla) under managed care (Presented by Anneke Moresco)
2022	International Society for Evolution, Medicine, & Public Health, Lisbon, Portugal
	Talk: An evolutionary perspective on microchimerism and human health
2022	California Workshop on Evolutionary Social Sciences, Fullerton, CA
	Poster: Characterizing the variation in fetal microchimerism throughout pregnancy
2022	(Presented by undergraduates: Amy Lam and Emilie Risha)
2022	American Association of Biological Anthropologist, Denver, CO and Virtual

2019	clusters using agent-based modeling approaches (Presented by Alex May) Human Behavior & Evolution Society, Boston, MA
	<u>Talk:</u> Cancer across species: Identifying mechanisms of cancer resistance (Presented by Jordyn Dolan) <u>Talk:</u> Cancer across species: Identifying mechanisms of cancer resistance (Presented by Lisa Abegglen) <u>Poster:</u> Investigations into decreasing the fitness of multicellular circulating tumor cell
	<u>Poster:</u> The role of early life adversity and breast cancer outcomes <u>Poster:</u> Life History, Cancer Incidence, and Cancer Mortality in Non-Human Primates (Presented by Valerie Harris)
2019	International Society for Evolution, Ecology and Cancer, Cambridge, UK
2019	Poster: Comparative Oncology: The evolution of cancer defenses across the tree of life
2010	<u>Talk:</u> The role of early life adversity and breast cancer outcomes <u>Talk:</u> Socioecological conditions shape postpartum immune trajectories (Presented by Carmen Hové) *cancelled due to COVID19 Concern Sinter Provide the constitution American Manting Indiana Con-
2020*	Human Biology Association, Los Angeles, CA
2020	Zombie Apocalypse Medicine Meeting, Virtual
	Poster: A Multi-scale approach to the evolution of Cancer Suppression (Presented by Zach Compton) <u>Poster: A life history model of mammary neoplasia across mammals (Presented by</u> Margan Fax)
2020	strategies (Presented by Maya Szafraniec) Cancer Systems Biology Consortium Annual Investigators Meeting, Virtual
2021	(Presented by Zachary Compton) American Association of Physical Anthropologist, Virtual Poster: The evolution of placenta diversification and mammalian reproductive
2021	Evolution, Virtual Talk: An evolutionary perspective on cancer prevalence in non-human primates
	<u>Talk:</u> A life history model of mammary neoplasia across mammals (Presented by Zachary Compton) <u>Talk:</u> Chimerism and cancer across the tree of life (Presented by Stefania Kapsetaki)
	<u>Talk</u> : Bridging paleopathology and evolutionary medicine in cancer research (Presented by Carina Marques) <u>Talk</u> : Female immune function across the reproductive continuum is responsive to environmental inputs (Presented by Carmen Hové)
2021	International Society for Evolution, Medicine, & Public Health, Virtual <u>Poster:</u> The evolution of placenta diversification and mammalian reproductive strategies (Presented by Maya Szafraniec)
2021	<u>Talk:</u> The ecology of cancer prevalence across species (Presented by Stephanie Kapsetaki)
2021	<u>Poster:</u> The ecology of cancer prevalence across species (Presented by Stephanie Kapsetaki)
2021	<u>Poster:</u> Characterizing the variation in fetal microchimerism throughout pregnancy (Presented by undergraduates: Amy Lam and Emilie Risha) Cancer Systems Biology Consortium Annual Investigators Meeting, Virtual
	<u>Poster</u> : Does parent-offspring conflict across mammals result in differing offspring growth by placenta morphology? (Presented by Maya Szafraniec)

	Poster: Are cravings, aversions, and nausea/vomiting associated with pregnancy
	complications? Investigating the role of maternal-fetal conflict in maternal eating
	behavior and pregnancy complications (Presented by Jessica Ayers)
2019	Collaborative Research Symposium, Ritz-Carlton Bacara, Santa Barbara
	<u>I alk:</u> Fetal microchimerism and maternal health
2018	International Society for Evolution, Medicine, & Public Health, Park City, UT
	Talk: Comparative Oncology: New insights into an ancient disease
	Talk: Life History, Cancer Incidence, and Cancer Mortality in Non-Human Primates
	(Presented by Valerie Harris)
2018	California Workshop on Evolutionary Social Sciences (CWESS), UC Santa Barbara
	Talk: Consequences of being (micro)chimeric
2018	Collaborative Research Symposium, Ritz-Carlton Bacara, Santa Barbara
	Talk: Life history trade-offs in reproduction and cancer
2018	Post-Simian Workshop, Nassau
	<u>Talk:</u> Trade-offs and cancer
2017	International Society for Evolution, Ecology and Cancer, Tempe, AZ
	Talk: A large-scale evaluation of neoplasia occurrence and life history traits in
	vertebrates
	Poster: Life History, Cancer Incidence, and Cancer Mortality in Non-Human Primates
	(Presented by Valerie Harris)
	Poster: Sharks do get cancer (Presented by Diego Mallo)
2017	Keystone Symposia, Maternal-Fetal crosstalk: Harmony vs. Conflict, Washington DC
	Poster: Cooperation & conflict beyond the womb
2017	Fitness Interdependence Workshop, Saguaro Lake, AZ
	Talk: Cooperation & conflict beyond the womb
2016	International Primatological Society/American Society of Primatologist, Chicago, IL
	Talk: Cancer Incidence and Mortality in Strepsirrhini at the Duke Lemur Center
2016	Human Behavior & Evolution Society, Vancouver, Canada
	Talk: Cooperation & conflict beyond the womb: Fetal microchimerism & maternal
	health
2016	International Society for Evolution, Medicine, & Public Health, Durham, NC
	<u>Ialk:</u> Cooperation & conflict beyond the womb: Fetal microchimerism & maternal
	health
2015	International Biannual Evolution and Cancer Conference, San Francisco, CA
	<u>Ialk:</u> Using agent-based modeling to understand the emergence of resistant cancer
	phenotypes
2015	Conference on Complex Systems, Tempe, AZ
	<u>Ialk:</u> Using agent-based modeling to understand the emergence of resistant cancer
	phenotypes
2015	Personalized Medicine Conference, Tucson, AZ
	Poster: Fetal microchimerism and maternal health: A review and evolutionary analysis
	of cooperation and conflict beyond the womb
2015	Society for Molecular Biology & Evolution, Vienna, Austria
0015	<u>Talk:</u> Cancer across the tree of life: Cooperation and cheating in multicellularity
2015	Organismality, St. Louis MO
2015	<u>I alk</u> : The phylogenetic origins of need-based transfers
2015	Human Behavior & Evolution Society, Columbia, MO
	<u>Lak</u> : Cancer susceptibility and reproductive trade-offs: A model of the evolution of
2015	cancer defenses
2015	international Society for Evolution, Medicine, & Public Health, Tempe AZ

	<u>Talk</u> : Are there trade-offs between reproductive competiveness and cancer susceptibility?
2013	Ecological and Evolutionary Perspectives in Cancer, Jacques Monod Roscoff, France <u>Poster</u> : The quiescent tortoise and the proliferative hare: Life history selection in cancer's evolutionary race
2013	Human Behavior and Evolution Society, Miami Beach, FL <u>Talk:</u> Do metabolic tradeoffs explain why humans have exceptionally large brains?
2013	Testing the expensive tissue hypothesis using phylogenetic analysis International Biannual Evolution and Cancer Conference, San Francisco, CA <u>Poster:</u> Does early adversity shape disease risk through adaptive calibration of hormonal profiles? Evolutionary life history theory in breast cancer and cardiovascular disease
2013	Biological Mechanisms in Evolution, Gordon Research Conferences, Easton, MA. <u>Poster</u> : Does early adversity shape disease risk through adaptive calibration of hormonal profiles? Evolutionary life history theory in breast cancer and cardiovascular disease
2012	Society for Molecular Biology and Evolution, Dublin, IE. <u>Poster:</u> Capuchin monkey transcriptome provides insight into primate brain evolution
2011	American Association of Physical Anthropologist, Minneapolis, MN. <u>Talk:</u> Phylogenetic analysis reveals relaxed constraints in primate encephalization during mammalian descent
2010	Evolution, Portland, OR. <u>Poster</u> : Phylogenetic analysis explains deviations from Brain: Body Allometric Scaling Laws in Primates and Cetacea
2009	American Society of Primatologist, San Diego, CA. <u>Poster</u> : Platyrrhine genomic resources: Shotgun libraries from Pitheciidae, Cebidae, and Atelidae
2007	Clinical Cardiovascular Genomics Conference, Cold Springs Harbor, NY. <u>Poster</u> : Genetic studies for abdominal aortic aneurysms: DNA linkage, Microarrays, and Genetics Association

OUTREACH

2024	Originalia: Reproductive Biology and Art Showcase, Glassbox Gallery UCSB
2024	Darwin Day Éducator Workshop, Tampa Bay STEM network, Tampa FL
	Talk: How to grow big and beat cancer
2023	Genetic Ghosts Stories, Exploratorium San Francisco, After Dark Series
	Talk: Genetic Ghosts: Understanding microchimerism
2023	Profs at the Pub - UCSB
	Shared Planet, Shared Health: How studying female animals can shed light on
	women's health
2023	Pregnancy souvenirs
	<u>Vox Unexplainable Podcast</u>
2023	Bug in the System: The Past, Present and Future of Cancer
	BBC podcast with host Kat Arney
2023	Cancer as an ancient disease: past and implications to the present
	Paleopathology Association Webinar Series
2023	Microchimerism and Mombies
	<u>Channel ZED</u>
2022	Cancer and the Nature of Life Series
	Transmissible Cancer in Mammals

2022	That Anthro Podcast
	Evolutionary Approaches to Human Health
2019	Zombified Podcast
	Microchimeric Mombies
2019	Isla Vista 2nd grade Science Outreach
	Activity and discussion on human-wildlife conflict and elephants
2019	Underestimated Podcast
	Consequence of being a multicellular organism
2017	Arizona State University Night of the Open Door
	Teaching life history theory to middle school children
2016	Science communication: Guest blog post at Tenure, She Wrote
	Thoughts on ''How to Get a Postdoc Position''
2016	Arizona State University EMERGE
	Teaching evolution & cancer through strategy games
2016	Arizona State University Night of the Open Door
	Teaching evolution & cancer to middle school children
2016	Northern Arizona University (NAU) Road Scholars Tour
	Teaching evolution & cancer to retirees

PEER REVIEWER

Proceed. of the Royal Soc. B	American Naturalist
Evolutionary Applications	Evolution, Medicine & Public Health
Nature Cancer Reviews	Genome, Biology, Evolution
Evolution	American Journal of Human Biology
PLOS Computational Biology	Molecular Phylogenetics and Evolution
Am. Journ. of Epidemiology	IScience
eLife	Journal of Mammology
Nature Ecology and Evolution	
	Proceed. of the Royal Soc. B Evolutionary Applications Nature Cancer Reviews Evolution PLOS Computational Biology Am. Journ. of Epidemiology eLife Nature Ecology and Evolution

MEMBERSHIPS

American Association for the Advancement of Science International Society for Evolution, Ecology and Cancer (founding member) International Society for Evolution, Medicine & Public Health (founding member) Human Biology Association Sigma Xi

SCIENCE IN THE MEDIA

2024	Interviewed by Hannah Thomasy, the Scientist, <u>A stranger to Oneself: The Mystery of Fetal</u>
	Microchimerism
2024	Interviewed by Sonia Fernandez, the UCSB Current, 'Originalia' art show celebrates the
	human reproductive system
2024	Interviewed by Sonia Fernandez, the UCSB Current, Researchers find that a new mother's
	immune status varies with her feeding strategy
2023	Interviewed by Katie Wu, the Atlantic, An awkward evolutionary theory for one of
	pregnancy's biggest complications
2023	Interviewed by Katie Wu, the Atlantic, The most mysterious cells in our bodies don't belong
	to us
2022	Interviewed by Katie Wu, the Atlantic, <u>Pregnancy is a war: Birth is a cease-fire</u>
2022	Interviewed by the UCSB Current, <u>A Planetary Sisterhood</u>
2022	Interviewed by Carrie Arnold, Scientific American, Insights from Pregnancy Could Help Fight
	Cancer

- 2022 Interviewed by the UCSB Current, <u>The Multitudes Within Us</u>
- 2022 Interviewed by the UCSB Current, <u>Animals and the Big C</u>
- 2021 Interviewed by Stephanie DeMarco, Drug Discovery News, <u>You have your mother's eyes –</u> and cells
- Interviewed by Sean Crommelin, The Daily Nexus, <u>Cancer and Chemo from a Wider Lens</u>
 Interviewed by Jacqueline Wen, The Daily Nexus, <u>UCSB Researcher Investigates Strategies</u>
- for Reducing Metastatic Potential of Cancer Cell Clusters
- 2018 Interviewed by Jacqueline Wen, The Daily Nexus, <u>UCSB joins large-scale cancer research</u> consortium
- 2017 Featured Scientist, The Chimera Experiments Project, Feature "<u>Realm of an Inner Child</u>" by Jeannette Louie
 - Interviewed by Katherine Rowland, Aeon, We are multitudes

Interviewed by Heather Marcoux, Motherly, <u>It's science: Your baby will always be a part of</u> you

2015 Regarding, "Fetal microchimerism and maternal health: A review and evolutionary analysis of cooperation and conflict beyond the womb Interviewed by:

Carl Zimmer, New York Times; <u>A pregnancy souvenir: cells that are not your own</u> Viviane Callier, The Smithsonian; Baby's cells can manipulate mom's body for decades

Ed Yong, National Geographic; Fetal cells hide out in mum's body, but what do they do?

Krisitin Magaldi, Medical Daily; <u>Fetal cells can be found in a new mother's body and will effect</u> <u>her health even after pregnancy</u>

limmy Jenkins, KJZZ radio, local Phoenix radio station

Michaeleen Doucleff, NPR radio –morning edition, Washington D.C., <u>Fetal cells may protect</u> <u>mom from disease long after the baby's born</u>

2015 Regarding "Cancer across the tree of life: cooperation and cheating in multicellularity", Interviewed by George Johnson, New York Times, <u>Cellular 'cheaters' give rise to cancer</u>

PROFESSIONAL DEVELOPMENT

- 2020 Treating cancer in zoo and aquaria species: Strategies to grow the ESCRA tumor database, NC State University, Virtual
- 2018 Promotion to Tenure Workshop, UC Santa Barbara
- 2017 Research Funding 101, UC Santa Barbara
- 2016 CoGe: Comparative Genomics Workshop, Arizona State University
- 2015 Complex Systems: Networks, Agent-based Models, Information Theory and Maximum Entropy Methods, Arizona State University
- 2015 Netlogo Workshop: Complex Systems, Arizona State University
- 2014 Complex Adaptive Systems, Arizona State University
- 2014 Workshop on Cancer Evolution and Evolutionary Medicine: Foundations and Future Directions, Wissenschaftskolleg zu Berlin
- 2011 National Postdoctoral Association Michigan Regional Symposium, Pathways to Careers, Wayne State University
- 2010 Analyzing Next Generation Sequencing Data Michigan State University
- 2010 Applying Next Generation Sequencing Technologies to Research Molecular Medicine Tri-Conference Short Course, San Francisco, CA
- 2010 Career opportunities after doctoral education and postdoctoral training Wayne State University
- 2008 Summer Institute in Statistical Genetics University of Washington: Human population genetic data analysis, Human association mapping

2007 NCBI Traveling Workshop: GenBank, Molecular Biology Resources, Entrez Gene QuickStart, Correlating Disease Genes and Phenotypes, BLAST QuickStart