# Taichi A. Suzuki

Assistant Professor Arizona State University

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Personal website: <a href="http://www.taichilab.org/">http://www.taichilab.org/</a> Google scholar profile: <a href="https://bit.ly/2URpLZx">https://bit.ly/2URpLZx</a>

# **EDUCATION**

2018 - 2022 Postdoctoral Research Associate, Microbiome Sciences

Max Planck Institute for Developmental Biology, Germany

Advisor: Ruth Ley

2013 - 2018 Ph.D., Integrative Biology

University of California Berkeley, CA, USA

Advisor: Michael Nachman

Thesis title: Ecology and evolution of the mammalian gut microbiota

2011 - 2013 Ph.D. student, Ecology and Evolutionary Biology

The University of Arizona, AZ, USA

Advisor: Michael Nachman

2009 - 2011 M.S., Ecology and Evolutionary Biology

The University of Arizona, AZ, USA

Advisor: Michael Nachman

Thesis title: Speciation and reduced hybrid female fertility in house mice

2005 - 2009 B.S., Animal Science and Resources

Nihon University, Kanagawa, Japan

Advisor: Masahiro Iwasa

Thesis title: A cross-experimental analysis of coat color variations and morphological characteristics of Japanese wild mouse, *Mus musculus* 

# **APPOINTMENTS**

**2024 – present** Graduate Faculty. Microbiology Program, School for Life Sciences,

Arizona State University, AZ, USA.

**2023 - present** Assistant Professor. College of Health Solutions and Biodesign Center

for Health Through Microbiomes, Arizona State University, AZ, USA.

**Graduate Faculty.** Biological Design Graduate Program, School for Engineering of Matter, Transport and Energy, Arizona State University,

USA.

2018 - 2022 Postdoctoral Research Associate. Department of Microbiome Sciences,

Max Planck Institute for Developmental Biology, Germany.

2015 – 2018	<b>Graduate Student Instructor</b> . Department of Integrative Biology, UC Berkeley, CA, USA.
2015	<b>Jerry O. Wolff Fellow.</b> Museum of Vertebrate Zoology, UC Berkeley, CA, USA.
2014	<b>Curatorial Assistant.</b> Museum of Vertebrate Zoology, UC Berkeley, CA, USA.
2013 - 2014	<b>Graduate Student Instructor.</b> Department of Integrative Biology, UC Berkeley, CA, USA.
2011 - 2013	<b>Teaching Assistant.</b> Department of Ecology and Evolutionary Biology, The University of Arizona, AZ, USA.

# **GRANTS AND FELLOWSHIPS**

PI: Autism Research Institute (\$100,000), Linking Human Ancestry and Microbiome to Predict Autism Treatment Outcomes, Co-I: Rosa Krajmalnik-Brown and Khemlal Nirmalkar (awarded)

PI: NIH, NIA, R61/R33 (\$3,033,178), The impact of heat stress on microbiome and aging, Co-PI: Joseph Roberts, Co-I: Haiwei Gu and Min-Hyun Kim (pending)

PI: NIH, NIGMS, R35 (\$1,809,714), Mammal-microbial coevolution: mechanisms and health implications (*pending*)

PI: Arizona Biomedical Research Center (\$225,000), Precision cardiovascular health: the role of human and microbial ancestry in Arizona, Co-I: Corrie Whisner and Rosa Krajmalnik-Brown (*pending*)

Co-I: Arizona Biomedical Research Center (\$225,000), The influence of bifidogenic dietary fibers on facture healing, PI: Joseph Roberts (*pending*)

PI: MedGenome/PacBio (whole genome sequencing), Peromyscus melanotis Genome: A Key to Understanding Host-Microbial Coevlution, Taxonomy, and Conservation (*pending*)

Co-I: PacBio SMART pitch (\$75,000), Probing the Gut-Sleep Axis: A Comprehensive Study of Microbiome Development and Sleep Patterns in Infants, PI: Sterling Write (*pending*)

PI: NSF, DEB, Evolutionary Processes (\$989,051), Host-microbial coevolution within and between species of deer mice, Co-I: Nathan Upham (*submitted*)

Co-I: The Peanut Institute (\$65,424), Osteoprotective and anti-inflammatory activity of peanuts during aging, PI: Joseph Roberts (*submitted*)

2022	DI NIII NICOLO DOS (\$1.004.101) E. 1.1.
2023	PI: NIH, NIGMS, R35 (\$1,924,131), Evolutionary mismatch of host-microbial genomes in mammalian biology ( <i>submitted</i> )
	PI: Pew Biomedical Scholars (\$324,000), Evolutionary mismatch of host-microbial genomes and chronic inflammation ( <i>submitted</i> )
	Co-I: NIH, DP5 (\$1,918,677), A system to predict emerging infectious diseases (SPEID), PI: Angel Fernandez ( <i>submitted</i> )
	Co-I: Arizona Biomedical Research Center (\$225,000), Effects of prebiotic-supplemented diets on fracture healing, PI: Joseph Roberts ( <i>submitted</i> )
2017	Louise Kellogg Fund (\$1,500), Museum of Vertebrate Zoology, UC Berkeley
2016	Graduate Division Summer Grant (\$3,500), Graduate Division, UC Berkeley
	Wilhelm L. F. Martens Fund (\$1,500), Museum of Vertebrate Zoology, UC Berkeley
2015	Doctorate Dissertation Improvement Grants (\$20,330), National Science Foundation
	Jerry O. Wolff Fellowship (\$11,000), Museum of Vertebrate Zoology, UC Berkeley
	Karl Koford Fund (\$2,000), Museum of Vertebrate Zoology, UC Berkeley
2014	Graduate Dean's Summer Research Grant (\$4,000), Graduate Division, UC Berkeley
	Louise Kellogg Fund (\$1,500), Museum of Vertebrate Zoology, UC Berkeley
	Leeper Fund (\$1,700), Department of Integrative Biology, UC Berkeley
2013	Young Explorers grant (\$5,000), National Geographic Society
	Grant-in-Aid of Research (\$900), Sigma Xi
2012	Galileo Circle Scholar (\$1,000), College of Science, The University of Arizona
	HONORS AND AWARDS
2024	40under40 award, Museum of Vertebrate Zoology, UC Berkeley
	Sun Award, Elizabeth Kizer, Arizona State University
2023	Nominated, Pew Biomedical Scholars, Arizona State University

2016 Outstanding Graduate Student Instructor Award, Teaching and Resource Center, UC Berkeley

Graduate Division Conference Travel award (\$1,500), Graduate Division UC Berkeley

ASM Student/Postdoc travel award (\$500), American Society of Microbiology

MVZ travel award (\$500), Museum of Vertebrate Zoology, UC Berkeley

GRAC travel award (\$250), Department of Integrative Biology, UC Berkeley

Research highlighted as a chapter opener in a textbook, Microbiology: Principles and Explorations, Ninth Edition, Black and Black. Jon Wiley & Sons (p. 690)

Nominated, International Student Research Fellowship, Howard Hughes Medical Institute.

Graduate Division Conference Travel award (\$1,500), Graduate Division UC Berkeley

GRAC travel award (\$250), Department of Integrative Biology, UC Berkeley

2014 MVZ travel award (\$500), Museum of Vertebrate Zoology, UC Berkeley

GRAC travel award (\$250), Department of Integrative Biology, UC Berkeley

## **PUBLICATIONS**

### In-preparation

<u>E.T. Fongenyam</u>, K. Nirmalkar J. Adams, R. Krajmalnik-Brown, **T.A. Suzuki.** Human ancestry and microbiome as predictors of fecal microbiome transfer therapy outcomes in Autism patients

<u>A. Patel</u> and T.A. Suzuki. Implications of host-microbial codiversification in health and disease.

<u>K. Socie</u>, B.L. Dumont, M.W. Nachman R. Krajmalnik-Brown, **T.A. Suzuki.** Novel approach: Host genetic effects on the gut microbiome.

**Suzuki, T.A.,** L. Voth-Gaeddert, J. Adams, H. Bean, A. Delgado, H. Gu, A. Mohr, K. Nirmalkar, J. Roberts, D. Shah, A. Shrivastava, E. Takyi, C. Whisner, <u>S. Wright</u>, R. Krajmalnik-Brown. Precision Health and the Microbiome: 10 Translational Challenges

**Suzuki, T.A.**, T. Akbuğa-Schön, J.L. Waters, D. Jakob, DL. Vu, M.A. Ballinger, S.C. Di Rienzi, H. Chang, I.E. de Araujo, A.V. Tyakht, R.E. Ley. Selection on the gut microbiome drives activity behavior in mice.

Fitzstevens, J.L., X. Liu, A. Ruaud, V. T. Schmidt, M. Mbong, J. R. Ngwese, **T.A.** Suzuki, N. T. Ha, A. Arzamasov, D. Rodionov, B. R. Adegbite, J. F. Zinsou, M. Esen, P.

<sup>\*</sup>Students in my lab are underlined

Thirumalaisamy, N.D. Youngblut, A.V. Tyakht, R.E. Ley. Bifidobacterium confer lactose tolerance in genetically-intolerant humans.

# **In-review**

X. Liu, L. Fitzstevens, V.T. Schmidt, **T.A. Suzuki**, A. Arzamasov, D. Rodionov, A. Pfleiderer, B.R. Adegbite, J.F. Zinsou, M. Esen, T.P. Velavan, A.A. Adegnika, L.H. Song, N.D. Youngblut, A. Osterman, A. Tyakht, R.E. Ley, Codiversification of salivary microbiota with humans.

# Peer-reviewed

- 2024 21. B.L. Dumont, D. Gatti, M.A. Ballinger, D. Lin, M. Phifer-Rixey, M.J. Sheehan, T.A. Suzuki, L.K. Wooldridge, H.O. Frempong, G. Churchill, C. Lutz, N. Rosenthal, J.K. White, M.W. Nachman. 2024. Into the Wild: A novel wild-derived inbred strain resource expands the genomic and phenotypic diversity of laboratory mouse models. *Plos Genetics* 20(4): e1011228
  - **20.** T. Akbuga-Schoen, **T.A. Suzuki**, D.L. Vu, D. Jakob, J.L. Waters, R.E. Ley. 2024. The keystone gut species Christensenella minuta boosts gut microbial biomass and voluntary physical activity in mice. *mBio* e0283623.
- 2022 19. Suzuki, T.A.\*, J.L. Fitzstevens\*, V.T. Schmidt, H. Enav, K. Huus, M. Mbong, A. Grießhammer, A. Pfleiderer, B.R. Adegbite, J.F. Zinsou, M. Esen, T.P. Velavan, A.A. Adegnika, L.H. Song, T.D. Spector, A.L. Muehlbauer, N. Marchi, H. Kang, L. Maier, R. Blekhman, L. Ségurel, G. Ko, N.D. Youngblut, P. Kremsner, R. E. Ley. 2022. Codiversification of gut microbiota with humans. *Science* 377:1328-1332. doi: 10.1126/science.abm7759 \*co-first

Perspective: A.H. Moeller. 2022. Loyal gut microbes. *Science* 377: 1263-1267. doi: 10.1126/science.ade2879

- **18. Suzuki, T.A.** and R. A. Ley. "Microbes set the (woodrat) menu: host genetics control diet-specific gut microbes" 2022. *Proceedings of the National Academy of Sciences of the U.S.A.* 119(2): e2120125118. (*Commentary*)
- 2021 (preprint) Suzuki, T.A.\*, L. Fitzstevens\*, V.T. Schmidt, H. Enav, K. Huus, M. Mbong, B.R. Adegbite, J.F. Zinsou, M. Esen, T.P. Velavan, A.A. Adegnika, L.H. Song, T.D. Spector, A.L. Muehlbauer, N. Marchi, R. Blekhman, L. Ségurel, N.D. Youngblut, P. Kremsner, R. E. Ley. 2021. Codiversification of gut microbiota with humans. *bioRxiv* https://doi.org/10.1101/2021.10.12.46297 \*co-first
  - 17. Beckman, E.J., F. Martins, T.A. Suzuki, K. Bi, S. Keeble, J. Good, A. Chavez, M. Ballinger, K. Agwamba, M.W. Nachman. 2021. The genomic basis of high-elevation adaptation in wild house mice (*Mus musculus domesticus*) from South America. *Genetics* iyab226.
  - **16.** Ferris, K.G., A.S. Chavez, **T.A. Suzuki**, E.J. Beckman, M. Phifer-Rixey, K. Bi, M.W. Nachman. 2021. The genomics of rapid climatic adaptation and parallel evolution in North American house mice. *PLoS Genetics* 17: e1009495.
- **2020 15.** Suzuki, T.A. and R.E. Ley. 2020. The role of the microbiota in human genetic

- adaptation. Science 370(6521): eaaz6827.
- **14. Suzuki, T.A.**, F.M. Martins, M. Phifer-Rixey, and M.W. Nachman. 2020. The gut microbiota and Bergmann's rule in wild house mice. *Molecular Ecology* 29:2300-2311.
- 2019 13. Suzuki, T.A., M. Phifer-Rixey, K.L. Mack, M.J. Sheehan, D. Lin, K. Bi, and M.W. Nachman. 2019. Host genetic determinants of the gut microbiota of wild mice. Molecular Ecology 13: 3197-3207. (F1000 recommended)
- 2018 12. Suzuki, T.A., F.M. Martins, and M.W. Nachman. 2018. Altitudinal variation of the gut microbiota in wild house mice. *Molecular Ecology* 28: 2378-2390.
  Featured in News and Views: Mazel F. 2019. Living the high life: Could gut microbiota matter for adaptation to high altitude? *Molecular Ecology* 28: 2119-2121.
  - **11.** Moeller, A.H., **T.A. Suzuki**, M. Phifer-Rixey, and M.W. Nachman. 2018. Transmission mode is associated with virulence in the mammalian gut microbiota. *Science* 362(6413): 453-457. (*F1000 recommended*)
  - **10.** Phifer-Rixey, M., K. Bi, K.G. Ferris, M.J. Sheehan, D. Lin, K. Mack, S.M. Keeble, **T.A. Suzuki**, J.M. Good, and M.W. Nachman. 2018. The genomic basis of environmental adaptation in house mice. *PLoS genetics* 14(9): e1007672
  - **9.** Iwasa, M.A., Kawamura S., Myoshu H., and **T.A. Suzuki**. 2018. Molecular analyses of the agouti allele in the Japanese house mouse identify a novel variant of agouti gene. *Genome* 61(3): 195-200.
- **8.** Moeller, A.H., **T.A. Suzuki**, D. Lin, E.A. Lacey, S.K. Wasser, and M.W. Nachman. 2017. Dispersal limitation drives the diversification of the mammalian gut microbiota. *Proceedings of the National Academy of Sciences of the U.S.A.* 114 (52), 13768 13773.
  - **7. Suzuki**, **T.A.** 2017. Links between natural variation in the microbiome and host fitness in wild mammals. *Integrative and Comparative Biology*. 57(4): 756-69.
- **2016 6. Suzuki, T.A.** and M.W. Nachman. 2016. Spatial heterogeneity of gut microbial composition along the gastrointestinal tract in natural populations of house mice. *PLOS ONE* 11(9): e0163720.
  - 5. Weyand, N.J., M. Ma, M. Phifer-Rixey, N.A. Taku, M.A. Rendón, A.M. Hockenberry, W.J. Kim, A.B. Agellon, N. Biais, T.A. Suzuki, L.G. Sait, O.B. Harrison, H.B. Bratcher, M.W. Nachman, M.C. J. Maiden, and M. So. 2016. Isolation and characterization of a new species of Neisseria, *Neisseria musculi*, from the wild house mouse. *International Journal of Systematic and Evolutionary Microbiology*. 66: 3585-3593.
- **4.** Suzuki, T.A. and M.W. Nachman. 2015. Speciation and hybrid female fertility in house mice. *Evolution* 69(9): 2468-81.
  - 3. Kandori I., K. Tsuchihara, T.A. Suzuki, T. Yokoi, D.R. Papaj. 2015. Long Frontal

Projections Help Battus philenor (Lepidoptera: Papilionidae) Larvae Find Host Plants. *PLOS ONE* 10(7): e0131596.

**2014 2. Suzuki, T.A.** and M. Worobey. 2014. Geographical variation of gut microbial composition in humans. *Biology Letters*. 10(2): 20131037.

Research highlighted in University press (selected): UC Berkeley news center (UC Berkeley <a href="https://bit.ly/3AasTQn">https://bit.ly/3AasTQn</a>), UA News (University of Arizona <a href="https://bit.ly/3xbp6R6">https://bit.ly/3xbp6R6</a>), etc.

Research highlighted in domestic and international media (selected): The Daily Californian (<a href="https://bit.ly/3AaGC9I">https://bit.ly/3AaGC9I</a>), Daily Mail (<a href="https://bit.ly/3qzfNHT">https://bit.ly/3qzfNHT</a>), io9 (<a href="https://bit.ly/3qw6gS4">https://bit.ly/3qw6gS4</a>), etc.

**1. Suzuki, T.A.** and M. A. Iwasa. 2013. A cross-experimental analysis of coat color variations and morphological characteristics of the Japanese wild mouse, Mus musculus. *Experimental Animals* 62(1): 25-34. (Journal cover photo)

# Non-peer reviewed

- 2024 Mohr, A.E., C. Whisner, T.A. Suzuki, K. Sweazea, Q. Zhu, D.D. Sears, S. Wright, M. Olson, T.W.L. Cross, A. Biruete, B. Trumble, J. Morimoto. 2024. Nutritional Trade-Offs and Gut Microbiome Dynamics: A Multidimensional Analysis of Diet-Health Interactions. OSF REGISTERES <a href="https://doi.org/10.17605/OSF.IO/M4XSF">https://doi.org/10.17605/OSF.IO/M4XSF</a>
  - **Suzuki, T.A.** 2024.アリゾナで挑む新たな研究者人生:困難と魅力 *Experimental Medicine 9 Aug.* DOI: 10.18958/7555-00006-0001707-00 (Japanese) https://www.yodosha.co.jp/jikkenigaku/articles/index.html?ci=170700
  - **Suzuki, T.A.** 2024. 腸内細菌と進化生態学:研究室立ち上げの道のり *Society of Evolutionary Studies, Japan News. 25(2) p 4-8* (Japanese). <a href="https://shorturl.at/sGAui">https://shorturl.at/sGAui</a>
- **2023** Suzuki, T.A. 2023. 疾病予防や治療につながる共多様化した菌種の探索. *Healthist* 47(6): p 6-9. ISNN 0389-6781 (Japanese): <a href="https://healthist.net/issue/282/">https://healthist.net/issue/282/</a>
  - **Suzuki, T.A.** 2023. ヒトと共に進化した腸内微生物. *Experimental Medicine* 41(4): 573-576. DOI: 10.18958/7195-00003-0000432-00 (Japanese) https://www.yodosha.co.jp/jikkenigaku/articles/index.html?ci=43200
  - Suzuki, T.A. 2023. ヒトと腸内微生物の共多様化. Japanese Scientists in Science 2022. 2023: p37 (Japanese) https://note.asca-co.com/n/n8c088de2cd20
- 2019 Moeller A., T.A. Suzuki, M. Phifer-Rixey, M.N. Nachman 2019. 哺乳類の腸内微生物 叢の伝搬経路 Japanese Scientists in Science 2018. 2019: p63 (Japanese) https://www.asca-co.com/company/pdf japanese scientists/Science 2018.pdf

# **INVITED TALKS**

**Suzuki, T.A.** Microbes matter in adaptation: phenotypic effects of microbiota in wild house mice. Symposium "Microbes matter: Phenotypic effects of microbiota on wild

- animal hosts", Society for Integrated and Comparative Biology, Atlanta, Georgia (Hosted by Brian Trevelline and Kaitlyn Murphy)
- **Suzuki, T.A.** Ecology and evolution of mammal-microbial interactions. Department of Ecology and Evolutionary Biology Seminar Series, University of Arizona, Tucson, Arizona (Hosted by Judi Bronstein)
- **2024 Suzuki, T.A.** The microbiome's role in animal ecology, evolution, and behavior. Student invited seminar, Department of Ecology and Evolutionary Biology, University of Minnesota, Minneapolis, Minnesota. (Student invited speaker, hosted by Zheng Oong)
  - **Suzuki, T.A.** Selection on the gut microbiome drives activity behaviors in mice. Symposium "How to train your microbiome (Plenary)", American Society of Microbiology (ASM) Microbe, Atlanta, Georgia (Hosted by David Baltrus and ASM)
  - **Suzuki, T.A.** Selection on the gut microbiome drives activity behaviors in mice. VuMedi Inc, online (Hosted by Tina Ayodele)
  - **Suzuki. T.A.** Ecology and evolution of mammal-microbial interactions. Advanced Topics in Biomedical Informatics (BMI461), Arizona State University, Tempe, AZ (Invited guest lecturer hosted by Matthew Scotch)
  - **Suzuki. T.A.** Ecology and evolution of mammal-microbial interactions. Comparative Genomics (BMI465), Arizona State University, Phoenix, AZ (Invited guest lecturer hosted by My Phan)
  - **Suzuki. T.A.** Ecology and evolution of mammal-microbial interactions. CURE (Course-Based Undergraduate Research Experience), Drexel University, Philadelphia, PA (Invited guest lecturer hosted by Megan Phifer-Rixey)
- **Suzuki, T.A.** Evolutionary mismatch of host-microbial genomes in mammalian biology. Biodesign Chalk Talk, Arizona State University, Tempe, Arizona. (Hosted by Marco Mangone)
  - **Suzuki, T.A.** Ecology and Evolution of host-microbial interactions. 7 mins of Science, Biodesign Town Hall meeting, Arizona State University, Tempe, Arizona. (Hosted by Josh LaBear)
  - **Suzuki, T.A.** The evolution of the human gut microbiota. Symposium at the 21<sup>st</sup> Awaji International Forum on Infection and Immunity, Karuizawa, Japan (Hosted by Cevayir Coban and Ken Ishii)
  - **Suzuki. T.A.** Ecology and Evolution of host-microbial interactions. Advanced Topics in Biomedical Informatics (BMI461), Arizona State University (Invited guest lecturer hosted by Matthew Scotch)
  - **Suzuki, T.A.** Evolution of the human microbiome. Translational Research Club seminar, Arizona State University, Phoenix, Arizona (Hosted by Kaylie Miller)

- **Suzuki, T.A.** Ecology and evolution of host-microbial interactions in human and wild mice. Biodesign seminar, Arizona State University, Tempe, Arizona (Hosted by Rosa Krajmalnik-Brown)
- **2022 Suzuki, T.A.**, Codiversification of gut microbiota with humans. Keystone symposia. The Human Microbiome: Ecology and Evolution. Banff, Alberta, Canada (Hosted by Ruth Ley, Alejandro Reyes, and Jessica Metcalf)
  - **Suzuki, T.A.**, Codiversification of gut microbiota with humans. Symposium at Center for Genome Sciences, National Autonomous University of Mexico, Morelos, Mexico (Hosted by Christian Sohlenkamp, original invitation to Ruth Ley) <a href="https://youtu.be/E8vqCvxbn5U">https://youtu.be/E8vqCvxbn5U</a>
  - **Suzuki, T.A.**, Ecology and evolution of host-microbial interactions in complex systems. Job talk, College of Health Solutions and Biodesign Center for Health Through Microbiomes. Arizona State University. (Hosted by the search committees)
  - **Suzuki, T.A.**, Ecology and evolution of host-microbial interactions in complex systems. Job talk, Department of Biology, Boston University. Online talk. (Hosted by the search committees)
- **2021 Suzuki, T.A.**, Ecology and evolution of host-microbial interactions in humans and wild mice. Distinguished Seminar Speaker Series, Max Planck Institute for Developmental Biology and Friedrich Miescher Laboratory, Germany, in person/online talk (Hosted by committees of the seminar).
  - **Suzuki, T.A.**, Ecology and evolution of host-microbial interactions in humans and wild mice. Milner Centre for Evolution seminar, University of Bath, UK, online talk (Hosted by Hans-Wihelm Nuetzmann and Leslie Turner)
  - **Suzuki, T.A.**, Codiversification of gut microbiota with humans. Institute for Systems Biology symposium, Seattle, U.S.A., online talk (Hosted by Sean Gibbons and committees of Institute for Systems Biology) <a href="https://youtu.be/u12G6tSLpjY">https://youtu.be/u12G6tSLpjY</a>
  - **Suzuki, T.A.**, The ecology and evolution of host-microbial interactions in mammals. Center for Ecological Research Seminar, Kyoto University, Japan. online talk (Hosted by Atsushi Yamauchi)
  - **Suzuki, T.A.**, The role of microbiome in host evolution: codiversified microbes in humans and artificial selection on the mouse microbiome. Microbiome seminar, The University of Oxford, UK, online talk. (Hosted by Sarah Knowles)
- **2020 Suzuki, T.A.** Codiversification of gut microbiota with humans. The 43<sup>rd</sup> Annual Meeting of the Molecular Biology Society of Japan. In the symposium "Evolution of gut microbiota in animals: Host-microbe interactions and mechanisms", online talk. (Hosted by Takane Katayama and Takashi Hayakawa)
- **2019 Suzuki, T.A.** Ecology and Evolution of wild mouse gut microbiota. Diko talk, Max Planck Institute of Developmental Biology, Tuebingen, Germany. (Hosted by Ruth Ley)

- **2017 Suzuki, T.A.** Interplay between host genetics and the gut microbiome in wild mice. Center of Population Biology Seminar, University of California Davis. Davis, California, U.S.A. (Hosted by Kathleen Ferris)
  - **Suzuki, T.A.**, M. Phifer-Rixey, K.G. Ferris, A. Chavez, Michael J. Sheehan, Ting-Ting Lin, and M.W. Nachman. Associating host genomic variation with gut microbial variation in wild house mice. Symposium: Genomic approaches to consequential questions in mammalogy, American Society of Mammalogists. Moscow, Idaho, U.S.A. (Hosted by Caleb Phillips and John Hanson)
  - **Suzuki, T.A.**, M. Phifer-Rixey, K.G. Ferris, A. Chavez, F.M. Martins, and M.W. Nachman. Gut microbiome and Bergmann's rule in natural populations of house mice. Symposium: With a little help from my friends: microbial partners in integrative and comparative biology, Society for Integrative and Comparative Biology. New Orleans, Louisiana, U.S.A. (Hosted by Kevin Kohl and Denise Dearing)
- **2016 Suzuki, T.A.**, M. Phifer-Rixey, K.G. Ferris, A. Chavez, M.W. Nachman. Ecology and evolution of gut microbial communities in natural populations of house mice. Animal Ecology Guest Seminar, Kyoto University, Japan. (Hosted by Masaki Hoso)
  - **Suzuki, T.A.**, M. Phifer-Rixey, K.G. Ferris, A. Chavez, M.W. Nachman. Associating host genomic variation with gut microbial diversity in wild house mice. Symposium: the evolution of species interactions. Society for the Study of Evolution, ASN spotlight, Austin, Texas U.S.A. (Hosted by Jesse Lasky)
- **Suzuki, T.A.** Gut microbial ecology in wild house mice. UCB-NTU Junior Scientist Symposium on Microbial Ecology, Genomics and Metagenomics. National Taiwan University, Taiwan. (Hosted by Alex Yu)
  - **Suzuki, T.A.** Ecology and evolution of gut microbial communities in natural populations of house mice. Nihon University, Japan. (Hosted by Masahiro Iwasa)
  - **Suzuki, T.A.** Ecology and evolution of gut microbial communities in natural populations of house mice. SY special seminar, Tokyo University, Japan. (Hosted by Takehito Yoshida)
  - **Suzuki, T.A.**, F.M. Martins, M. Phifer-Rixey, Y. Zhang, W. Taylor, M.W. Nachman. Clinal variation of gut microbial composition in natural populations of house mice across the Americas. 5<sup>th</sup> Annual Yosemite Symbiosis Workshop, Wawona, California, U.S.A. (Hosted by Joel Sachs)

#### **PRESENTATIONS**

- \*Students in my lab are underlined
- 2024 <u>Socie, K.</u>, B. Dumont, M.W. Nachman, R. Krajmalnik-Brown, **T.A. Suzuki**. Host genetic effects on the mammalian gut microbiome. 3<sup>rd</sup> Joint Congress on Evolutionary Biology, Montreal, Canada (talk) <a href="https://tinyurl.com/2s3ccsvz">https://tinyurl.com/2s3ccsvz</a>

- Socie, K., B. Dumont, M.W. Nachman, R. Krajmalnik-Brown, T.A. Suzuki. Investigating host genetic effects on microbiome assembly: a novel approach. American Society for Microbiology, Atlanta, GA. (poster)
- **Suzuki, T.A.** Host genetic effects on the gut microbiome. CHS Research Day, College of Health Solutions, Arizona State University, Phoenix, AZ. (poster)
- **2023** Suzuki, T.A., T. Schön, J. Waters, M. Ballinger, R.E. Ley. Artificial selection experiment on the mammalian microbiome. Society for the Study of Evolution. Albuquerque, NM. (talk)
  - **Suzuki, T.A.** Ecology and evolution of host-microbial interactions in humans and wild mice. 62<sup>nd</sup> Arizona Southern Nevada American Society for Microbiology Branch Meeting, University of Arizona, Tucson, AZ. (talk)
  - **Suzuki, T.A.** Suzuki lab: Ecology and evolution of host-microbial interactions. CHS Research Day, College of Health Solutions, Arizona State University, Phoenix, AZ. (poster)
- 2022 Suzuki, T.A., L. Fitzstevens, V.T. Schmidt, H. Enav, K. Huus, M. Mbong, B.R. Adegbite, J.F. Zinsou, M. Esen, T.P. Velavan, A.A. Adegnika, L.H. Song, T.D. Spector, A.L. Muehlbauer, N. Marchi, R. Blekhman, L. Ségurel, N.D. Youngblut, P. Kremsner, R. E. Ley. 2021. Codiversification of gut microbiota with humans. Keystone Symposia, The Human Microbiome: Ecology and Evolution. Banff, Canada (poster and short talk)
- **2021 Suzuki, T.A.**, Liam Fitzstevens, Hagay Enav, Victor T. Schmidt, Nicholas D. Youngblut, Mirabeau Mbong, Ruth E. Ley. Codiversification of gut microbiota with humans. Society for the Study of Evolution, virtual meeting (talk)
  - **Suzuki, T.A.**, Liam Fitzstevens, Hagay Enav, Victor T. Schmidt, Nicholas D. Youngblut, Mirabeau Mbong, Ruth E. Ley. 2021. Codiversification of gut microbes and their human hosts. The Biology of Genomes, virtual meeting (talk)
- 2019 Suzuki, T.A., M. Phifer-Rixey, K.L. Mack, M.J. Sheehan, D. Lin, K. Bi, and M.W. Nachman. 2019. Host genetic determinants of the gut microbiota of wild mice. 21st Annual Meeting of the Society of Evolutionary Studies, Japan. (talk, Symposium organizer.)
- **2017 Suzuki, T.A.**, M. Phifer-Rixey, K.G. Ferris, A. Chavez, Michael J. Sheehan, Ting-Ting Lin, and M.W. Nachman. 2017. Associating host genomic variation with gut microbial variation in wild house mice. Society for the Study of Evolution. Portland, Oregon. (talk)
- **2016 Suzuki, T.A.**, M. Phifer-Rixey, K.G. Ferris, A. Chavez, F.M. Martins, and M.W. Nachman. 2016. Gut microbiome and Bergmann's rule in natural populations of house mice. Bay Area Population Genomics Conference, San Francisco, California. (poster)
  - **Suzuki, T.A.**, M. Phifer-Rixey, K.G. Ferris, A. Chavez, F.M. Martins, and M.W. Nachman. 2016. Gut microbiome and Bergmann's rule in natural populations of house mice. 6<sup>th</sup> ASM conference on Beneficial Microbes, Seattle, Washington. (poster)

- **Suzuki, T.A.**, M. Phifer-Rixey, F.M. Martins, and M.W. Nachman. 2016. Gut microbiome and Bergmann's rule in natural populations of house mice. Society for the Study of Evolution, Austin, Texas. (poster)
- **2015 Suzuki, T.A.,** F.M. Martins, M. Phifer-Rixey, M.W. Nachman. 2015. Microbial variation and Bergmann's rule: clinal variation of gut microbial communities in wild house mice across the Americas. Animal-Microbe Symbioses, Gordon Research Conference, Waterville Valley, New Hampshire. (poster).
  - Ferris, K.G., A.S. Chavez, M. Phifer-Rixey, **T.A. Suzuki**, M.W. Nachman. 2015. The genetics of environmental adaptation in house mice across Western North America. Society for Molecular Biology and Evolution, Vienna, Austria. (poster).
  - Kawamura, S., **T.A. Suzuki**, M.A. Iwasa. 2015. Reevaluation of the agouti allele in Japanese wild mice. International Wildlife Management Congress, Sapporo, Japan. (talk).
- **2014 Suzuki, T.A.** and M.W. Nachman, 2014. Spatial variation of gut microbial communities in the gastrointestinal tract of natural populations of house mice. Society for the Study of Evolution, Raleigh, North Carolina. (talk)
  - **Suzuki, T.A.** and M.W. Nachman, 2014. Microbial variation and Bergmann's rule: clinal variation of gut microbes in house mice across North America. Bay Area Population Genetics X, Stanford, California. (poster)
- **2013 Suzuki, T.A.** and M.W. Nachman, 2013. Microbial variation and Bergmann's rule: clinal variation of gut microbes in house mice across North America. Gordon Research Conferences, Microbial Population Biology, Andover, New Hampshire. (poster)
  - **Suzuki, T.A.** and M.W. Nachman, 2013. Microbial variation and Bergmann's rule: clinal variation of gut microbes in house mice across North America. Society for the Study of Evolution, Snowbird, Utah. (talk)
- **Suzuki, T.A.** 2012. Geographic variation of human gut microbial composition. Grad Blitz at University of Arizona, Tucson, AZ (speed talk)
  - **Suzuki, T.A.**, M.W. Nachman, and M. Worobey, 2012. Geographic variation of human gut microbiome composition. Society for the Study of Evolution, Ottawa, Canada. (talk)
- **Suzuki, T.A.** and M.W. Nachman, 2011. Speciation and hybrid female subfertility in house mice. Society for the Study of Evolution, Norman, Oklahoma. (talk)
- **Suzuki**, **T.A.** and M.W. Nachman, 2010. Speciation and hybrid female fertility in house mice. Society for the Study of Evolution, Portland, Oregon. (poster)
- **Suzuki, T.A.** and M.A. Iwasa, 2008. Coat color variations of wild mouse in an urban area. The Mammalogical Society of Japan, Yamaguchi, Japan. (poster)

# **TEACHING**

2024 Co-lead, Biostatistics (HCD300), Arizona State University

	Invited lecture, Advanced Topics in Biomedical Informatics (BMI461) Arizona State University, Tempe, AZ
	Invited lecture, Comparative Genomics (BMI465), Arizona State University, Phoenix, AZ
	Invited lecture, Course-Based Undergraduate Research Experience, Drexel University, Philadelphia, PA
2023	Instructor, Biostatistics (HCD300), Arizona State University
	Invited lecture, Advanced Topics in Biomedical Informatics (BMI461) Arizona State University, Tempe, AZ
2013 - 2018	Graduate Student Instructor, General Biology (Bio 1B), UC Berkeley
2017	Graduate Student Instructor, Natural History of Vertebrates (IB104), UC Berkeley
2014	Invited lecture, Mammalogy (IB173), UC Berkeley
2013	Teaching Assistant, Population Genetics (ECOL426/526), The University of
	Arizona Invited lecture at Wildlife Disease Club, The University of Arizona
2012	Teaching Assistant, Mammalogy (ECOL485/585), The University of Arizona Teaching Assistant, Human Genetics (ECOL223), The University of Arizona Invited lecture, Wildlife Disease Club, The University of Arizona
2011	Teaching Assistant, Mammalogy (ECOL485/585), The University of Arizona Teaching Assistant, Human Genetics (ECOL223), The University of Arizona

#### **MENTORING**

# **2023-present** Postdoc Advisor at ASU:

Sterling Wright (co-advised by Corrie Whisner, NIH T32 mentor) (2024 Fall-present)

Gabriele Schiro (co-advised by Lauren Petrullo) (2024 Fall-present)

# Graduate student Advisor at ASU:

Emerson Taminang Fongeyam, Masters student (Biomedical Informatics program, College of Health Solutions) (2024 Fall - present)

Aishwarya Patel, PhD student (Microbiology program, School of Life Sciences) (2024 Spring - present)

Kaitlyn Socie, PhD student (Biological Design Graduate program, Ira A Fulton Engineering, co-advised by Rosa Krajmalnik-Brown) (2023 Fall - present)

# PhD/MS committee member at ASU:

Gilma De Leon, MS student (School of Life Sciences) (2024 Fall)

Magdalena Olson, PhD student (College of Health Solution) (2024 Fall - present) Angel Fernandez, PhD student (School of Life Sciences) (2024 Spring - present) Hannah Glesener, PhD student (Ira A Fulton Engineering) (2023 Fall – present) Elizabeth Saucedo, MS student (College of Health Solution) (2023 Spring – present)

#### External PhD/MS committee member:

Eveliina Hanski, PhD student, University of Oxford, UK (2023 Spring)

#### GSA/TA mentor at ASU:

Manish Muchapothula, MS student (College of Health Solutions) (2024 Fall) Isaias Laris, undergraduate student (College of Health Solutions) (2024 Spring) Vanessa Delgado, PhD student (College of Health Solutions) (2023 Fall) Rachel Dong, undergraduate student (College of Health Solutions) (2023 Fall)

# Barrett honors project mentor at ASU:

Jainan Marble, undergraduate student (Thesis committee, School of Historical, Philosophical and Religious Studies) (2024 Fall)

Daniel Oesterle, undergraduate student (Thesis committee, College of Health Solutions) (2024 Fall)

Noah Voss, undergraduate student (HCD300, College of Health Solutions) (2024 Fall)

Kim Galvan-Jauregui, undergraduate student (HCD300, College of Health Solutions) (2024 Fall)

Benjamin Glennon, undergraduate student (HCD300, College of Health Solutions) (2024 Fall)

Kamilah Hall, undergraduate student (HCD300, College of Health Solutions) (2024 Spring)

Joshelyn Ruelas, undergraduate student (HCD300, College of Health Solutions) (2023 Fall)

Jaquelyn Ruelas, undergraduate student (HCD300, College of Health Solutions) (2023 Fall)

#### Research project mentor at ASU:

Manish Muchapothula, MS student (BMI540) (2024 Fall - present)

Madhav Sankar, MS student (BMI540) (2024 Fall)

Rhett Nyman, undergraduate researcher (CHS494) (2024 Spring - present)

Lina Ali, undergraduate volunteer (2023 Fall - present)

Kavya Prasad, MS student volunteer (2023 Fall – 2024 Spring)

Savannah Pacheco, undergraduate student (MIC401) (2023 Fall)

Chun Hin Leung, undergraduate student (MIC401) (2023 Summer)

# 2013 - 2018 Research Mentor, Undergraduate Research Apprenticeship Program, UC Berkeley (alphabetical):

Savannah Berkley, Brian Chen, Sharon Chen, Muriam Choudhery, Michael Dizma, Awad Faddoul, Winnie Feng, Tory Harwin, Erik Hernandez, Daniela Hernandez, Gabriela Heyer, Yu Jin Hwang, Emmy Jin, Casie Lee, Glen Lipschitz, Adhayana Paul, Anna Petrosky, Micah Rodriguez, Madeleine Rossanese, Akram Saad, Niki Sabetfakhri, Yu Sato, Elizabeth Serrano, Eric Shiah, Jane Yang, and JiaYi Zhang.

# SERVICE AND OUTREACH

# **2014 - present**

Served as reviewer, 57 peer-review records of 39 manuscripts; Plos One (13), Science (5), Scientific Reports (5), Nature Microbiology (4), Microbial Ecology (4), ISME journal (3), FEMS Microbial Ecology (3), Organisms Diversity and Evolution (3), Microbiome (2), Microbiology and Molecular Biology Reviews (2), Proceedings of the Royal Society B (2), High Altitude Medicine and Biology (2), International Journal of Avian Science (2), Mammalian Genome (2), Nature Ecology and Evolution (1), Science Advances (1), Frontiers in Microbiology (1), BMC Microbiology (1), PeerJ (1), Journal of Mammalogy (1), International Journal of Women's Health and Wellness (1), Austin Journal of Reproductive Medicine and Infertility (1), High Altitude Medicine & Biology (1), Journal of Evolutionary Biology (1). (see <a href="https://orcid.org/0000-0001-7800-8596">https://orcid.org/0000-0001-7800-8596</a>)

**2023 - present** Member, Speaker Series Committee, College of Health Solutions, Arizona State University

Participated in mentor/mentee program, College of Health Solutions, Arizona State University

**2024 – present** NSF ad hoc reviewer: DEB, Population and Community Ecology. IOS, Integrative Ecological Physiology.

Member of Graduate Admission Committee, Biomedical Informatics MS/PhD, College of Health Solutions, Arizona State University

Participated in Peer Teaching Review Program, College of Health Solutions, Arizona State University

Interviewer for Graduate Admission, Microbiology program, School of Life Sciences, Arizona State University

Symposium organizer, "Evolutionary dynamics of animal-microbe symbiosis", 3<sup>rd</sup> Joint Congress of Evolutionary Biology, Montreal, Canada (selected 20 speakers for four 75 min sessions)

Speaker, NIH INTERACT T32 seminar, College of Health Solutions, Arizona State University

Annual Evaluation Reviewer, College of Health Solutions, Arizona State University

Volunteered, College of Health Solutions Open Door, Downtown campus, Arizona State University.

Interviewed by PhD students from NTR500 Research Methods, Arizona State University (Shelby Tyler and Alanoud Alrashidi)

#### Taichi Suzuki Curriculum Vitae Jan. 2025

Co-organizer, Microbiome workshop, Biodesign Center for Health Through

Microbiomes, Arizona State University

Member of Lab manager hiring committee, Biodesign Center for Health Through Microbiomes, Biodesign Institute, Arizona State University Student Poster Judge, Ronald Fisher award, FUSION, Biodesign Institute, Arizona State University Served as organizer and presenter of Biodesign 20<sup>th</sup> Anniversary Art Exhibit, Biodesign Institute, Arizona State University Provided commentary on a research article for Live Science https://tinyurl.com/3j9e3am2 2023 Interviewer, MS Dietetic Internship, College of Health Solutions, Arizona State University Organizer, Open Door, Biodesign Center for Health Through Microbiomes, Biodesign Institute, Arizona State University Member, HTM Seminar Committee, Biodesign Center for Health Through Microbiomes, Biodesign Institute, Arizona State University Featured in Ask a Biologist, Arizona State University: https://askabiologist.asu.edu/explore/evolution-gut-microbiome Interviewed by academyhills, Challenger's relay (Japanese) 2020 https://www.academyhills.com/note/opinion/challengers2.html 2015 Interviewed by The Graduates, UC Berkeley. KALX 90.7FM https://shows.acast.com/the-graduates/episodes/taichi-suzuki 2014 Interviewed by Super Human Radio (SHR # 1362) https://superhumanradio.net/tags/taichi-suzuki 2013 - 2014 Official blogger, Embassy of the United States of America (Japanese) https://bit.ly/3w5Broj 2012 - 2014 Deputy editor of Kagakusha Network (Japanese Non-profit organization supporting students and researchers studying abroad) http://www.kagakusha.net/members/taichi-suzuki 2012 Interviewed and research highlighted on the front page of newspaper, Arizona Daily Star, https://bit.ly/3jrbJrS 2010 - 2011 President, Japanese Student Association at The University of Arizona Invited lecture, Hermosa Montessori Elementary School as the President of 2011 Japanese Association, Tucson Arizona

2008 Curator Assistant, Kanagawa Prefectural Museum of Natural History, Japan.

# **SOCIETY MEMBERSHIPS**

Society for the Study of Evolution Society for Integrative and Comparative Biology Studies of Evolutionary Studies, Japan American Society of Mammalogists The Mammal Society of Japan American Society for Microbiology