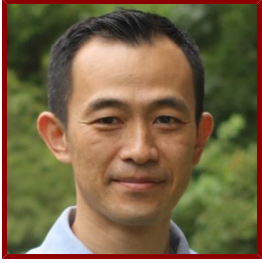


Stanford



Tadashi Fukami

Associate Professor of Biology

 Curriculum Vitae available Online

CONTACT INFORMATION

• Alternate Contact

Yolanda Madrid - Administrative Associate

Email ylmadrid@stanford.edu

Tel (650) 723-2424

Bio

ACADEMIC APPOINTMENTS

- Associate Professor, Biology

PROFESSIONAL EDUCATION

- PhD, Univ of Tennessee, Knoxville , Ecology & Evolutionary Biology (2003)

LINKS

- Fukami Lab: <http://www.stanford.edu/~fukamit/>

Research & Scholarship

CURRENT RESEARCH AND SCHOLARLY INTERESTS

Ecological and evolutionary community assembly, with emphasis on understanding historical contingency in community structure, ecosystem functioning, biological invasion and ecological restoration, using experimental, theoretical, and comparative methods involving bacteria, protists, fungi, plants, and animals.

PROJECTS

- Nectar microbes in ume orchards - Stanford University (12/7/2017 - present)

Teaching

COURSES

2017-18

- Climate change ecology: Is it too late?: BIO 35N (Spr)
- Ecological Statistics: BIO 202 (Aut)
- Introduction to Research in Ecology and Evolutionary Biology: BIO 46 (Win)
- Introduction to Research in Ecology and Evolutionary Biology: BIO 47 (Spr)

2016-17

- Ecology of the Hawaiian Islands: BIO 116, EARTHSYS 116 (Aut)
- Introduction to Research in Ecology and Evolutionary Biology: BIO 46 (Win)
- Introduction to Research in Ecology and Evolutionary Biology: BIO 47 (Spr)

2015-16

- Foundations of Community Ecology: BIO 227 (Aut)

2014-15

- Core Plant Biology & Eco Evo Laboratory: BIO 44Y (Spr)
- Ecology of the Hawaiian Islands: BIO 116, EARTHSYS 116 (Aut)

STANFORD ADVISEES

Doctoral Dissertation Reader (AC)

Laura Bogar, Glade Dlott, Diana Rypkema, Jeffrey Smith, Daniel Sprockett

Orals Chair

Robert Ingersoll

Doctoral Dissertation Advisor (AC)

John Hendershot, Po-Ju Ke

Doctoral (Program)

John Hendershot, Po-Ju Ke

GRADUATE AND FELLOWSHIP PROGRAM AFFILIATIONS

- Biology (School of Humanities and Sciences) (Phd Program)

Publications

PUBLICATIONS

- **Linking modern coexistence theory and contemporary niche theory** *ECOLOGICAL MONOGRAPHS*
Letten, A. D., Ke, P., Fukami, T.
2017; 87 (2): 161-177
- **Evolutionary priority effects persist in anthropogenically created habitats, but not through nonnative plant invasion.** *New phytologist*
Brandt, A. J., Lee, W. G., Tanentzap, A. J., Hayman, E., Fukami, T., Anderson, B. J.
2017
- **Non-target effects of fungicides on nectar-inhabiting fungi of almond flowers** *ENVIRONMENTAL MICROBIOLOGY REPORTS*
Schaeffer, R. N., Vannette, R. L., Brittain, C., Williams, N. M., Fukami, T.
2017; 9 (2): 79-84
- **Precipitation alters the strength of evolutionary priority effects in forest community assembly of pteridophytes and angiosperms** *JOURNAL OF ECOLOGY*
Brandt, A. J., Tanentzap, A. J., Leopold, D. R., Heenan, P. B., Fukami, T., Lee, W. G.
2016; 104 (6): 1673-1681
- **Genetic basis of priority effects: insights from nectar yeast.** *Proceedings. Biological sciences*
Dhami, M. K., Hartwig, T., Fukami, T.
2016; 283 (1840): -?
- **Nonlinear, interacting responses to climate limit grassland production under global change** *PROCEEDINGS OF THE NATIONAL ACADEMY OF SCIENCES OF THE UNITED STATES OF AMERICA*
Zhu, K., Chiariello, N. R., Tobeck, T., Fukami, T., Field, C. B.

2016; 113 (38): 10589-10594

- **Forest area and connectivity influence root-associated fungal communities in a fragmented landscape** *ECOLOGY*
Vannette, R. L., Leopold, D. R., Fukami, T.
2016; 97 (9): 2374-2383
- **Convergence and divergence in a long-term old-field succession: the importance of spatial scale and species abundance** *ECOLOGY LETTERS*
Li, S., Cadotte, M. W., Meiners, S. J., Pu, Z., Fukami, T., Jiang, L.
2016; 19 (9): 1101-1109
- **Hierarchical neighbor effects on mycorrhizal community structure and function.** *Ecology and evolution*
Moeller, H. V., Dickie, I. A., Peltzer, D. A., Fukami, T.
2016; 6 (15): 5416-5430
- **Nectar microbes can reduce secondary metabolites in nectar and alter effects on nectar consumption by pollinators** *ECOLOGY*
Vannette, R. L., Fukami, T.
2016; 97 (6): 1410-1419
- **Plant and root endophyte assembly history: interactive effects on native and exotic plants** *ECOLOGY*
Sikes, B. A., Hawkes, C. V., Fukami, T.
2016; 97 (2): 484-493
- **Florivory and pollinator visitation: a cautionary tale.** *AoB PLANTS*
Tsuji, K., Dhimi, M. K., Cross, D. J., Rice, C. P., Romano, N. H., Fukami, T.
2016; 8
- **Mycorrhizal co-invasion and novel interactions depend on neighborhood context** *ECOLOGY*
Moeller, H. V., Dickie, I. A., Peltzer, D. A., Fukami, T.
2015; 96 (9): 2336-2347
- **When do plant radiations influence community assembly? The importance of historical contingency in the race for niche space** *NEW PHYTOLOGIST*
Tanentzap, A. J., Brandt, A. J., Smissen, R. D., Heenan, P. B., Fukami, T., Lee, W. G.
2015; 207 (2): 468-479
- **Evolutionary priority effects in New Zealand alpine plants across environmental gradients** *JOURNAL OF BIOGEOGRAPHY*
Leopold, D. R., Tanentzap, A. J., Lee, W. G., Heenan, P. B., Fukami, T.
2015; 42 (4): 729-737
- **Complex organism-environment feedbacks buffer species diversity against habitat fragmentation** *ECOGRAPHY*
Zee, P. C., Fukami, T.
2015; 38 (4): 370-379
- **Historical Contingency in Community Assembly: Integrating Niches, Species Pools, and Priority Effects** *ANNUAL REVIEW OF ECOLOGY, EVOLUTION, AND SYSTEMATICS, VOL 46*
Fukami, T.
2015; 46: 1-23
- **Temporal variation in fungal communities associated with tropical hummingbirds and nectarivorous bats** *FUNGAL ECOLOGY*
Belisle, M., Mendenhall, C. D., Brenes, F. O., Fukami, T.
2014; 12: 44-51
- **Rapid evolution of adaptive niche construction in experimental microbial populations** *EVOLUTION*
Callahan, B. J., Fukami, T., Fisher, D. S.
2014; 68 (11): 3307-3316
- **Environmental variability counteracts priority effects to facilitate species coexistence: evidence from nectar microbes.** *Proceedings. Biological sciences / The Royal Society*
Tucker, C. M., Fukami, T.
2014; 281 (1778): 20132637-?
- **Ectomycorrhizal fungal traits reflect environmental conditions along a coastal California edaphic gradient.** *FEMS microbiology ecology*

- Moeller, H. V., Peay, K. G., Fukami, T.
2014; 87 (3): 797-806
- **Honey bees avoid nectar colonized by three bacterial species, but not by a yeast species, isolated from the bee gut.** *PloS one*
Good, A. P., Gauthier, M. L., Vannette, R. L., Fukami, T.
2014; 9 (1)
 - **Historical contingency in species interactions: towards niche-based predictions** *ECOLOGY LETTERS*
Vannette, R. L., Fukami, T.
2014; 17 (1): 115-124
 - **Honey bees avoid nectar colonized by three bacterial species, but not by a yeast species, isolated from the bee gut.** *PloS one*
Good, A. P., Gauthier, M. L., Vannette, R. L., Fukami, T.
2014; 9 (1)
 - **Non-Native Plants Disrupt Dual Promotion of Native Alpha and Beta Diversity** *FOLIA GEOBOTANICA*
Fukami, T., Bellingham, P. J., Peltzer, D. A., Walker, L. R.
2013; 48 (3): 319-333
 - **Patterns and Processes of Microbial Community Assembly** *MICROBIOLOGY AND MOLECULAR BIOLOGY REVIEWS*
Nemergut, D. R., Schmidt, S. K., Fukami, T., O'Neill, S. P., Bilinski, T. M., Stanish, L. F., Knelman, J. E., Darcy, J. L., Lynch, R. C., Wickey, P., Ferrenberg, S.
2013; 77 (3): 342-356
 - **IBI* series winner. Integrating inquiry-based teaching with faculty research.** *Science*
Fukami, T.
2013; 339 (6127): 1536-1537
 - **Plant-soil feedbacks: the past, the present and future challenges** *JOURNAL OF ECOLOGY*
van der Putten, W. H., Bardgett, R. D., Bever, J. D., Bezemer, T. M., Casper, B. B., Fukami, T., Kardol, P., Klironomos, J. N., Kulmatiski, A., Schweitzer, J. A., Suding, K. N., van de Voorde, T. F., Wardle, et al
2013; 101 (2): 265-276
 - **Consequences of plant-soil feedbacks in invasion** *JOURNAL OF ECOLOGY*
Suding, K. N., Harpole, W. S., Fukami, T., Kulmatiski, A., MacDougall, A. S., Stein, C., van der Putten, W. H.
2013; 101 (2): 298-308
 - **Complex plant-soil interactions enhance plant species diversity by delaying community convergence** *JOURNAL OF ECOLOGY*
Fukami, T., Nakajima, M.
2013; 101 (2): 316-324
 - **Animals in a bacterial world, a new imperative for the life sciences** *PROCEEDINGS OF THE NATIONAL ACADEMY OF SCIENCES OF THE UNITED STATES OF AMERICA*
McFall-Ngai, M., Hadfield, M. G., Bosch, T. C., Carey, H. V., Domazet-Loso, T., Douglas, A. E., Dubilier, N., Eberl, G., Fukami, T., Gilbert, S. F., Hentschel, U., King, N., Kjelleberg, et al
2013; 110 (9): 3229-3236
 - **Nectar bacteria, but not yeast, weaken a plant-pollinator mutualism.** *Proceedings. Biological sciences / The Royal Society*
Vannette, R. L., Gauthier, M. L., Fukami, T.
2013; 280 (1752): 20122601-?
 - **Nectar bacteria, but not yeast, weaken a plant - pollinator mutualism** *PROCEEDINGS OF THE ROYAL SOCIETY B-BIOLOGICAL SCIENCES*
Vannette, R. L., Gauthier, M. L., Fukami, T.
2013; 280 (1752)
 - **Rat invasion of islands alters fungal community structure, but not wood decomposition rates** *OIKOS*
Peay, K. G., Dickie, I. A., Wardle, D. A., Bellingham, P. J., Fukami, T.
2013; 122 (2): 258-264
 - **Context matters: volunteer bias, small sample size, and the value of comparison groups in the assessment of research-based undergraduate introductory biology lab courses.** *Journal of microbiology & biology education : JMBE*
Brownell, S. E., Kloser, M. J., Fukami, T., Shavelson, R. J.

2013; 14 (2): 176-182

- **Soil-mediated indirect impacts of an invasive predator on plant growth** *BIOLOGY LETTERS*
Wardle, D. A., Bellingham, P. J., Fukami, T., Bonner, K. I.
2012; 8 (4): 574-577
- **Area and the rapid radiation of Hawaiian Bidens (Asteraceae)** *JOURNAL OF BIOGEOGRAPHY*
Knobe, M. L., Morden, C. W., Funk, V. A., Fukami, T.
2012; 39 (7): 1206-1216
- **Flowers as Islands: Spatial Distribution of Nectar-Inhabiting Microfungi among Plants of Mimulus aurantiacus, a Hummingbird-Pollinated Shrub** *MICROBIAL ECOLOGY*
Belisle, M., Peay, K. G., Fukami, T.
2012; 63 (4): 711-718
- **Introduced Canopy Tree Species Effect on the Soil Microbial Community in a Montane Tropical Forest** *PACIFIC SCIENCE*
Lynch, H. B., Epps, K. Y., Fukami, T., Vitousek, P. M.
2012; 66 (2): 141-150
- **Phylogenetic relatedness predicts priority effects in nectar yeast communities** *PROCEEDINGS OF THE ROYAL SOCIETY B-BIOLOGICAL SCIENCES*
Peay, K. G., Belisle, M., Fukami, T.
2012; 279 (1729): 749-758
- **Do assembly history effects attenuate from species to ecosystem properties? A field test with wood-inhabiting fungi** *ECOLOGY LETTERS*
Dickie, I. A., Fukami, T., Wilkie, J. P., Allen, R. B., Buchanan, P. K.
2012; 15 (2): 133-141
- **Evolutionary history, immigration history, and the extent of diversification in community assembly** *FRONTIERS IN MICROBIOLOGY*
Knobe, M. L., Forde, S. E., Fukami, T.
2012; 3
- **Community assembly: alternative stable states or alternative transient states?** *ECOLOGY LETTERS*
Fukami, T., Nakajima, M.
2011; 14 (10): 973-984
- **Linking community and ecosystem dynamics through spatial ecology** *ECOLOGY LETTERS*
Massol, F., Gravel, D., Mouquet, N., Cadotte, M. W., Fukami, T., Leibold, M. A.
2011; 14 (3): 313-323
- **Evolutionary history, immigration history, and the extent of diversification in community assembly.** *Frontiers in microbiology*
Knobe, M. L., Forde, S. E., Fukami, T.
2011; 2: 273-?
- **Assembly history dictates ecosystem functioning: evidence from wood decomposer communities** *ECOLOGY LETTERS*
Fukami, T., Dickie, I. A., Wilkie, J. P., Paulus, B. C., Park, D., Roberts, A., Buchanan, P. K., Allen, R. B.
2010; 13 (6): 675-684
- **Assembly history dictates ecosystem functioning: evidence from wood decomposer communities** *Ecology Letters*
Fukami T, Dickie IA, Wilkie JP, Paulus BC, Park D, Roberts A, Buchanan PK, Allen RB
2010; 13: 675-684
- **Direct and indirect effects of rats: does rat eradication restore ecosystem functioning of New Zealand seabird islands?** *BIOLOGICAL INVASIONS*
Mulder, C. P., Grant-Hoffman, M. N., Towns, D. R., Bellingham, P. J., Wardle, D. A., Durrett, M. S., Fukami, T., Bonner, K. I.
2009; 11 (7): 1671-1688
- **Empirical and theoretical challenges in aboveground-belowground ecology** *OECOLOGIA*
van der Putten, W. H., Bardgett, R. D., de Ruiter, P. C., Hol, W. H., Meyer, K. M., Bezemer, T. M., Bradford, M. A., Christensen, S., Eppinga, M. B., Fukami, T., Hemerik, L., Molofsky, J., Schaedler, et al
2009; 161 (1): 1-14
- **Long-Term Effects of Predator Arrival Timing on Prey Community Succession** *AMERICAN NATURALIST*

- Olito, C., Fukami, T.
2009; 173 (3): 354-362
- **Immigration history controls diversification in experimental adaptive radiation** *NATURE*
Fukami, T., Beaumont, H. J., Zhang, X., Rainey, P. B.
2007; 446 (7134): 436-439
 - **Above- and below-ground impacts of introduced predators in seabird-dominated island ecosystems.** *Ecology Letters*
Fukami T, Wardle DA, Bellingham PJ, Mulder CPH, Towns DR, Yeates GW, Bonner KI, Durrett MS, Grant-Hoffman MN, Williamson WM
2006; 9: 1299-1307
 - **Species divergence and trait convergence in experimental plant community assembly** *ECOLOGY LETTERS*
Fukami, T., Bezemer, T. M., Mortimer, S. R., van der Putten, W. H.
2005; 8 (12): 1283-1290
 - **Long-term ecological dynamics: reciprocal insights from natural and anthropogenic gradients** *PROCEEDINGS OF THE ROYAL SOCIETY B-BIOLOGICAL SCIENCES*
Fukami, T., Wardle, D. A.
2005; 272 (1577): 2105-2115
 - **Dispersal, spatial scale, and species diversity in a hierarchically structured experimental landscape** *ECOLOGY LETTERS*
Cadotte, M. W., Fukami, T.
2005; 8 (5): 548-557
 - **Species divergence and trait convergence in experimental plant community assembly.** *Ecology Letters*
Fukami, T., Bezemer, TM, Mortimer, SR, Van der Putten, WH
2005; 8: 1283-1290
 - **Constructing nature: Laboratory models as necessary tools for investigating complex ecological communities** *ADVANCES IN ECOLOGICAL RESEARCH, VOL. 37: POPULATION DYNAMICS AND LABORATORY ECOLOGY*
Cadotte, M. W., Drake, J. A., Fukami, T.
2005; 37: 333-353
 - **Productivity-biodiversity relationships depend on the history of community assembly** *NATURE*
Fukami, T., Morin, P. J.
2003; 424 (6947): 423-426
 - **On similarity among local communities in biodiversity experiments** *OIKOS*
Fukami, T., Naeem, S., Wardle, D. A.
2001; 95 (2): 340-348