Nhu Nguyen

College of Tropical Agriculture and Human Resources

Department of Tropical Plant and Soil Sciences

FTE Distribution: 70% R, 30% I

Education

Degree	University	Major
Bachelor	Louisiana State University	Biological Sciences
PhD	University of California, Berkeley	Microbiology

Professional Appointments

Title	Employer	Dates Employed
Assistant Researcher	University Hawai‘i at Mānoa	2016-2021
Associate Researcher	University Hawai‘i at Mānoa	2021-present

Courses Taught

Course ID	Credits	Semester/Year	No of Students
TPSS 604	4	Spring 2025	5
TPSS 432/L	4	Spring 2024	22
TPSS 604	4	Spring 2023	8
TPSS 677	1	Fall 2022	22
BOT 430/L	4	Spring 2022	17
TPSS 711	2	Fall 2021	4
TPSS 604	4	Spring 2021	9
TPSS 677	1	Spring 2020	24
BOT 430/L	4	Spring 2020	18
TPSS 480	4	Spring 2020	9
MICR 485	3	Spring 2019	14
TPSS 711	2	Fall 2018	4
TPSS 604	4	Spring 2018	9
TPSS 604	4	Spring 2017	6

Publications (last 4 years)

Refereed Journal Publications

Bouwman T, Higa L, Lee C, Young S, Ragasa A, Bonito G, **Nguyen NH**, Du Z-Y. Biochemical and Molecular Characterization of Fungal Isolates from California Annual Grassland Soil. Biotechnology for Biofuels and Bioproducts, in press.

Slanzon GS, Yuan M, Estera-Molina K, Chew A, Pett-Ridge J, Firestone MK, **Nguyen NH**. Quantitative stable isotope probing (qSIP) and cross-domain networks reveal bacterial-fungal interactions in the hyphosphere. Microbiome, in press.

Dhungana I*, **Nguyen NH**. (2025). Repeated cultivation of annual crops drives cyclical microbial community development in a tropical Oxisol soil. Microbial Ecology 88, 30. doi: doi.org/10.1007/s00248-025-02530-3

Lofgren L, **Nguyen NH**, Kennedy PG, Pérez Pazos E*, Fletcher J, Liao H-L, Wang H, Zhang K, Ruytinx J, Smith AH*, Ke Y-H, Cotter HVT, Engwall E, Hameed K, Vilgalys R, Branco S. (2024). *Suillus*: an emerging model for the study of ectomycorrhizal ecology and evolution. New Phytologist 242:1448–1475. doi: 10.1111/nph.19700

Lewis RW, Bittenbender HC, Heisey S*, **Nguyen NH**. (2024). Phyllosphere to ferment: Site conditions structure cacao pod and ferment microbiomes in Hawai‘i. PhytoFrontiers. doi: 10.1094/PHYTOFR-08-23-0104-R

Abe JNA*, Dhungana I, **Nguyen NH**. Legume-nodulating rhizobia are widespread in soils and plants across the island of O‘ahu, Hawai‘i. PLOS ONE 18(9): e0291250. doi: 10.1371/journal.pone.0291250

Wilson AW, Eberhardt U, **Nguyen NH**, Noffsinger C, Swenie R, Loucks JJ, Perry BA, Hererra M, Osmundson T, Duhon-Delong S, Beker HJ, Mueller GM. (2023). Does one size fit all? Variation in the DNA barcode gap of macrofungal genera. Journal of Fungi, 9, 788. doi: 10.3390/jof9080788

Ke Y-H, Branco S, Bazzicalupo AL, **Nguyen NH**, Liao HL, Kennedy P, Bruns TD, Kuo A, LaButti K, Barry K, Grigoriev I, Vilgalys R. (2023). Genomic determination of breeding systems in basidiomycete fungi: direct evidence for balancing selection and trans-specific evolution of HD MAT genes between sister genera of suilloid fungi. 2023 Apr 18:iyad069. doi: 10.1093/genetics/iyad069

Nguyen NH. (2023). Fungal hyphosphere microbiomes are distinct from surrounding substrates and show consistent association patterns. Microbiology Spectrum 11:2, e04708-22. doi: 10.1128/spectrum.04708-22

Dhungana I, Kantar MB, **Nguyen NH**. (2023). Root exudate composition from different plant species influences the growth of rhizosphere bacteria. Rhizosphere, 25:100645. doi: 10.1016/j.rhisph.2022.100645

Shemesh H, Bruns TD, Peay KG, Kennedy PG, **Nguyen NH**. (2023). Changing balance between dormancy and mortality determines trajectory of ectomycorrhizal fungal spore longevity over a 15 year burial experiment. New Phytologist, 238:11–15. doi: 10.1111/nph.18677

McGrath CR, Hicks Pries CE, **Nguyen NH**, Glazer B, Lio S, Crow SE. (2022). Minerals limit the deep soil respiration response to warming in a tropical Andisol. Biogeochemistry. In press. DOI: 10.1007/s10533-022-00965-1.

Amend AS, et al. (2022). A ridge-to-reef ecosystem microbial census reveals environmental reservoirs for animal and plant microbiomes. Proceedings of the National Academy of Sciences, 119, e2204146119. DOI: 10.1073/pnas.2204146119

Heisey S, Ryals R, Maaz MT, **Nguyen NH**. (2022). A single application of compost can leave lasting impacts on soil microbial community structure and alter cross-domain interaction networks. Frontiers in Soil Science 2:749212. DOI: 10.3389/fsoil.2022.749212

Plakidas JD, **Nguyen NH**, Ferro ML. (2022). A new species of *Neostenoptera* Meunier (Diptera: Cecidomyiidae: *Winnertziinae*) from Hawai‘i. Insecta Mundi, 941:1–12.

Erlandson S, Margis R, Ramirez A, **Nguyen NH**, Lofgren L, Liao H-L, Vilgalys R, Kennedy P, Peay K. (2022). Transcriptional acclimation and spatial differentiation characterize drought response by the ectomycorrhizal fungus *Suillus pungens*. New Phytologist, 234:1910–1913. DOI: 10.1111/nph.17816

Maaz MT, **Nguyen NH**, Del Valle Echevarria A, Kantar M, Mileyko Y, Muszynski M. (2022). Design and implementation of a cohort-based undergraduate research experience in the agricultural sciences. Natural Sciences Education 51, e20076. DOI: 10.1002/nse2.20076

Bazzicalupo AL, Erlandson S, Branine M, Ratz M, Ruffing L, **Nguyen NH**, Branco S. (2021). Fungal community shift along steep environmental gradients from geothermal soils in Yellowstone National Park. Microbial Ecology, doi:10.1007/s00248-021-01848-y

Nuccio E, **Nguyen NH**, Nunes da Rocha U., Mayali X, Bougoure J, Weber P, Brodie E, Firestone M, Pett-Ridge J. Community RNA-Seq: Multi-kingdom responses to living versus decaying roots in soil. ISME Communications, doi.org/10.1038/s43705-021-00059-3

Erlandson S, Margis R, Ramirez A, **Nguyen NH**, Lofgren L, Liao H-L, Vilgalys R, Kennedy P, Peay K. Transcriptional acclimation and spatial differentiation characterize drought response by the ectomycorrhizal fungus *Suillus pungens*. New Phytologist, https://doi.org/10.1111/nph.17816

Bazzicalupo AL, Erlandson S, Branine M, Ratz M, Ruffing L, **Nguyen NH**, Branco S. 2021. Fungal community shift along steep environmental gradients from geothermal soils in Yellowstone National Park. Microbial Ecology, doi:10.1007/s00248-021-01848-y

Perez-Pazos E, Certano A, Gagne J*, Lebeuf R, Siegel N, **Nguyen NH**, Kennedy P. 2021. The slippery nature of ectomycorrhizal host specificity: *Suillus* fungi associated with novel pinoid (*Picea*) and abietoid (*Abies*) hosts. Mycologia 113:891-901. DOI: 10.1080/00275514.2021.1921525

Yuan M, Kakouridis A, Starr E, **Nguyen NH**, Shi S, Pett-Ridge J, Nuccio E, Zhou J, and Firestone M. 2021. Fungal-bacterial co-occurrence patterns differ between AMF and non-mycorrhizal fungi across soil niches. mBio 12:e03509-20. DOI: 10.1128/mBio.03509-20

Jamison J, Khanal SK, **Nguyen NH**, Deenik JL. 2021. Assessing the effects of digestates and combinations of digestates and fertilizer on yield and nutrient use of *Brassica juncea* (Kai Choy). Agronomy 11:509. DOI: 10.3390/agronomy11030509

Lofgren L, **Nguyen NH**, Vilgalys R, Ruytinx J, Liao H-L, Branco S, Kuo A, LaButti K, Lipzen Anna, Andreopoulos W, Pangilinan J, Riley R, Hundley H, Na H, Barry K, Grigoriev I, Stajich J, Kennedy P. 2021. Comparative genomics reveals dynamic genome evolution in host specialist ectomycorrhizal fungi. New Phytologist 230:774-792. DOI: 10.1111/nph.17160

Põlme S, Abarenkov K, Henrik Nilsson R, Lindahl BD, Clemmensen KE, Kauserud H, … Tedersoo L. 2021. FungalTraits: a user-friendly traits database of fungi and fungus-like stramenopiles. Fungal Diversity 105:1-16. DOI: 10.1007/s13225-020-00466-2

Creative Works (ex. Extension Videos, Websites, Blogs, etc.)
Lab website: http://www2.hawaii.edu/~nn33/lab/index.html
Rhizobia of Hawai‘i: https://sites.google.com/hawaii.edu/rhizobia/home

Graduate Students (Most recent year only 2022-2023)

Category	Number of Students	Number that Graduated
Chair of Master Committees	1	0
Chair of PhD Committees	2	0
Member of Master Committees	0	0
Member of PhD Committees	4	0

Grant Support (Active)

Title of Grant: “ABCs of SUCCESS: Associating Biology and Chemistry to study SUCCession in Environmental SurfaceS”
Dollar Value: $9,000,000
Dates of Grant: 10/1/2024 – 9/30/2029
Role: Co-PI

Title of Grant: “DSFAS: Soil Health Fingerprinting: Rapidly Predicting Soil Health in a Diversity of Soils Using Machine Learning”
Dollar Value: $650,000
Dates of Grant: 10/1/2023 – 9/30/2028
Role: Co-PI

Title of Grant: “Fungal-Bacterial Interactions: Bridging soil niches in regulating carbon and nitrogen processes”
Source of Grant: US Department of Energy
Dollar Value: $3,400,000
Dates of Grant: 10/1/2022 – 9/30/2025
Role: PI

Title of Grant: Ho‘akamai: Building Expertise in FACT Using Active Learning (BE-FACTUAL)
Source of Grant: US Department of Agriculture
Dollar Value: = $497,600
Dates of Grant: 10/1/2020 - 9/30/2026
Role: PI

Presentations at Conferences (last 4 years)

Title: Advancing our understanding of bacterial-fungal interactions through quantitative stable isotope probing (qSIP) and fungal-bacterial networks
Authors (put an asterisk on the presenter): Giovana S. Slanzon*, Mengting Yuan, Katerina Estera-Molina, Aaron Chew, **Nhu H. Nguyen**
Name of Conference: 12th International Mycological Congress, Masstricht, The Netherlands
Date of Presentation: August 2024

Title: Advancing Soil Health Evaluation: A Rapid Approach to Enhance Soil Biodiversity Assessment
Authors (put an asterisk on the presenter): Gaetan Martin*, **Nhu Nguyen**
Name of Conference: Ecological Society of America Annual Meeting, Long Beach, CA
Date of Presentation: August 2024

Title: Biomineralization and decomposition of oxalates and their implications on carbon cycling
Authors (put an asterisk on the presenter): **Nhu Nguyen***, Laurens Stouthart, Viviana Gaytan
Name of Conference: Ecological Society of America Annual Meeting, Long Beach, CA
Date of Presentation: August 2024

Title: Ectomycorrhizal Suillus fungi represent hot-spots of metabolic diversity, structured by gene presence/absence variation and significant horizontal gene transfer.
Authors (put an asterisk on the presenter): Lotus Lofgren*, Steven Ahrendt, Sameer Mudbhari, Paul Abraham, Sara Branco, Hui-Ling Liao, **Nhu Nguyen**, Peter Kennedy, Kerrie Barry, Alan Kuo, Igor Grigoriev, Rytas Vilgalys.
Name of Conference: 32nd Fungal Genetics Conference, Asilomar, CA.
Date of Presentation: March 2024

Title: Spatial and temporal dynamics of microbial community structure and network complexity in a California annual grassland soil.
Authors (put an asterisk on the presenter): Giovana Simao Slanzon*, Mengting Yuan, Katerina Estera-Molina, Javier A. Ceja-Navarro, Donald Herman, Christina Fossum, Aaron Chew, Liyou Wu, Jizhong Zhou, Christian Santos-Medellin, Joanne Emerson, Steven Blazewicz, Jennifer Pett-Ridge, Mary K. Firestone, and **Nhu Nguyen**.
Name of Conference: Ecological Society of America Annual Meeting, Portland, OR.
Date of Presentation: August 2023

Title: Fungal-bacterial cooccurrence patterns differ between arbuscular mycorrhizal fungi and nonmycorrhizal fungi across soil niches.
Authors (put an asterisk on the presenter): Maggie Yuan*, Anne Kakouridis, Evan Starr, **Nhu Nguyen**, Shengjing Shi, Jennifer Pett-Ridge, Jizhong Zhou, Mary Firestone.
Name of Conference: Mycological Society of America Annual Meeting, Flagstaff, AZ.
Date of Presentation: July 2023

Title: Genus-wide comparative genomic and phylogenetic analysis of ectomycorrhizal *Suillus* fungi reveal a complex history of gene evolution, including significant gene presence/absence variation and horizontal gene transfer
Authors (put an asterisk on the presenter): Lotus Lofgren*, Steven Ahrendt, Sara Branco, Hui-Ling Liao, **Nhu Nguyen**, Peter Kennedy, Kerrie Barry, Igor Grigoriev, Kurt LaButti, Rytas Vilgalys.
Name of Conference: Mycological Society of America Annual Meeting, Flagstaff, AZ.
Date of Presentation: July 2023

Title: Fungal biomineralization of oxalates in mycelial mats and their bacteria associates
Authors (put an asterisk on the presenter): **Nguyen NH***, Heisey S, Lin A, Lee Sophia, Stouthart L.
Name of Conference: Mycological Society of America Annual Meeting, Gainesville, FL.
Date of Presentation: 2022

Title: Do plant species and their root exudates influence soil microbes in a tropical soil?
Authors (put an asterisk on the presenter): Dhungana I*, **Nguyen NH.**
Name of Conference: Soil Ecology Society Biannual Meeting, Richland, WA.
Date of Presentation: 2022

Title: Soil microbial community coalescence in continuous cropping
Authors (put an asterisk on the presenter): Dhungana I*, **Nguyen NH.**
Name of Conference: Ecological Society of America, Annual Meeting, online.
Date of Presentation: 2021

Title: The soil microbiome: A nexus between environmental and human health
Authors (put an asterisk on the presenter): **Nhu Nguyen***
Name of Conference: Canadian Institute for Advanced Research (CIFAR) Human & the Microbiome (HMB) meeting
Date of Presentation: 2021

Title: Metagenomic study of soil fungal communities associated with Southern hemisphere exotic pine forests.
Authors (put an asterisk on the presenter): Rytas Vilgalys*, J. Alejandro Rojas, Hui-Ling Liao, Ko Hsuan Chen, **Nhu Nguyen**, Peter Kennedy, Tom Bruns, Jason Hoeksema, Jonathan Plett, Jeff Powell, Ian Anderson.
Name of Conference: Mycological Society of America Annual Meeting
Date of Presentation: 2021

Title: Soil microbial community coalescence in continuous cropping
Authors (put an asterisk on the presenter): Dhungana I*, **Nguyen N.H.**
Name of Conference: Ecological Society of America Annual Meeting
Date of Presentation: 2021

Poster Presentations

Title: Yeast Diversity in Coffee Blossoms of O‘ahu
Authors: Angelina V. Spicer* & Nhu H. Nguyen
Name of Conference: Summer Undergraduate Research Experience (SURE) Symposium
Date of Presentation: August 2024

Title: Native or Exotic? Cataloging Hawaiian Mushroom Biodiversity
Authors: Luke H. Amerine* & Nhu H. Nguyen
Name of Conference: Summer Undergraduate Research Experience (SURE) Symposium
Date of Presentation: August 2024

Title: Automated Hyperparameter Tuning and Optimal Model Selection for Maize Data Classification
Authors: Zhuocheng Gan*, Malisa Lo*, Jessica Araszewski*, Keara Botanes*, Amanda Godfrey*, Urban Halpern*, Gunnar Larsen*, Ruby Noland, Ken Kiehl, Maya Pimolwatana-Montoya, Michael Kantar, Tai Maaz, Yuriy Mileyko, Michael Muszynski, Nhu Nguyen
Name of Conference: Summer Undergraduate Research Experience (SURE) Symposium
Date of Presentation: August 2024

Title: Rooting for Resilience: Uncovering Resilient Varieties in a Changing Environment

Authors: Jessica Araszewski*, Keara Botanes*, Zhuocheng Gan*, Amanda Godfrey*, Urban Halpern*, Gunnar Larsen*, Malisa Lo*, Ruby Noland*, Ken Kiehl, Maya Pimolwatana-Montoya, Michael Kantar, Tai Maaz, Yuriy Mileyko, Michael Muszynski, Nhu Nguyen
Name of Conference: Summer Undergraduate Research Experience (SURE) Symposium
Date of Presentation: August 2024

Title: Amaizing Agro-Synergy: Examining Similarities and Resilience Between Maize Genetic Histories Under Stress
Authors: Amanda Godfrey*, Gunnar Larsen*, Jessica Araszewski*, Keara Botanes*, Zhuocheng Gan*, Urban Halpern*, Malisa Lo*, Ruby Noland*, Ken Kiehl, Maya Pimolwatana-Montoya, Michael Kantar, Tai Maaz, Yuriy Mileyko, Michael Muszynski, Nhu Nguyen
Name of Conference: Summer Undergraduate Research Experience (SURE) Symposium
Date of Presentation: August 2024

Title: Roots vs. Shoots: An Exploration of Variance Between Maize Genetic Classes and Phenotypes Using Machine Learning and Statistical Methods
Authors: Urban Halpern*, Ruby Noland*, Jessica Araszewski*, Keara Botanes*, Zhuocheng Gan*, Amanda Godfrey*, Gunnar Larsen*, Malisa Lo*, Ken Kiehl, Maya Pimolwatana-Montoya, Michael Kantar, Tai Maaz, Yuriy Mileyko, Michael Muszynski, Nhu Nguyen
Name of Conference: Summer Undergraduate Research Experience (SURE) Symposium
Date of Presentation: August 2024

Title: Insights from deep learning with MIR spectroscopy in Hawaii soil health modeling and assessment.
Authors (put an asterisk on the presenter): Tanner Beckstrom, Tai M. Maaz, Michael B. Kantar, Jonathan L. Deenik, Qi Chen, **Nhu H. Nguyen**, Susan E. Crow
Name of Conference: Soil Science Society of America, St. Louis, MO.
Date of Presentation: October 2023.

Title: Genome-wide association studies of heavy metal tolerance in the ectomycorrhizal fungus *Suillus luteus* reveal genes involved in regulation, repair and transport.
Authors (put an asterisk on the presenter): Cyndi Mae Bandong, Janne Swinnen, Anna Lipzen, Anna Bazzicalupo, Laura Coninx, Kerrie Barry, Sara Branco, **Nhu Nguyen**, Igor Grigoriev, Jan Colpaert, Joske Ruytinx
Name of Conference: 6th International Molecular Mycorrhiza Meeting, Cambridge, UK.
Date of Presentation: 2023

Title: Corn conundrum: the differential growth of maize genotypes adapted to different geographic locations.
Authors (put an asterisk on the presenter): Ethan S. Morrell*, Danielle Jaden K. Yamagata-Santos*, Abigail H. Ana, Joseph Carmelo M. Averion, Roma Amor B. Malasarte, Zeus Gean Paul Miguel, Amanda K. Nitta, Stephenie Andriana Santos, Kayla-Marie A. Torres, Keilah C. Wilkes, Rishi Prasadh, Michael Kantar, Tai Maaz, Michael Muszynski, **Nhu Nguyen**
Name of Conference: Summer Undergraduate Research Experience (SURE) Symposium, University of Hawai‘i at Mānoa.
Date of Presentation: July 2023

Title: Phenotypic plasticity within a single maize cultivar in response to multiple abiotic stressors.
Authors (put an asterisk on the presenter): Roma Amor B. Malasarte*, Kayla-Marie A. Torres*, Abigail H. Ana, Joseph Carmelo M. Averion, Zeus Gean Paul Miguel, Ethan S. Morrell, Amanda K. Nitta, Stephenie Andriana Santos, Keilah C. Wilkes, D. Jaden Yamagata-Santos, Rishi Prasadh, Michael Kantar, Tai Maaz, Michael Muszynski, **Nhu Nguyen**
Name of Conference: Summer Undergraduate Research Experience (SURE) Symposium, University of Hawai‘i at Mānoa.
Date of Presentation: July 2023

Title: Establishing an awareness of ideal plant phenotype based on environmental challenges.
Authors (put an asterisk on the presenter): Amanda K. Nitta*, Joseph Carmelo M. Averion*, Abigail H. Ana, Roma B. Amor Malasarte, Zeus Gean Paul Miguel, Ethan S. Morrell, Stephenie Andriana Santos, Kayla-Marie A. Torres,

Keilah C. Wilkes, D. Jaden Yamagata-Santos, Rishi Prasadh, Michael Kantar, Tai Maaz, Michael Muszynski, **Nhu Nguyen**
Name of Conference: Summer Undergraduate Research Experience (SURE) Symposium, University of Hawai‘i at Mānoa.
Date of Presentation: July 2023

Title: Towards improving food security: maize resiliency to changing environment.
Authors (put an asterisk on the presenter): Zeus Gean Paul Miguel*, Stephenie Andriana Santos*, Abigail H. Ana, Joseph Carmelo M. Averion, Roma Amor B. Malasarte, Ethan S. Morrell, Amanda K.Nitta, Kayla-Marie A. Torres, Keilah C. Wilkes, Danielle Jaden Yamagata-Santos, Rishi Prasadh, Michael Kantar, Tai Maaz, Michael Muszynski, **Nhu Nguyen**
Name of Conference: Summer Undergraduate Research Experience (SURE) Symposium, University of Hawai‘i at Mānoa.
Date of Presentation: July 2023

Title: Exploring gene expression in maize genotypes with different responses to drought.
Authors (put an asterisk on the presenter): Abigail H. Ana*, Keilah C. Wilkes*, Joseph Carmelo M. Averion, Roma Amor B. Malasarte, Zeus Gean Paul Miguel, Ethan S. Morrell, Amanda K. Nitta, Stephenie Andriana Santos, Kayla-Marie A. Torres, D. Jaden Yamagata-Santos, Rishi Prasadh, Michael Kantar, Tai Maaz, Michael Muszynski, **Nhu Nguyen**
Name of Conference: Summer Undergraduate Research Experience (SURE) Symposium, University of Hawai‘i at Mānoa.
Date of Presentation: July 2023

Title: Potentials of tropical soil microbes to solubilize strongly sorbed phosphorus from Hawaiian soils.
Authors (put an asterisk on the presenter): Ishwora Dhungana*, **Nhu Nguyen**
Name of Conference: Mycological Society of America Annual Meeting, Flagstaff, AZ.
Date of Presentation: July 2023

Title: Extracellular polymeric substance (EPS) production as an outcome of bacterial-fungal interactions among soil microbes
Authors (put an asterisk on the presenter): Rishi Prasadh*, **Nhu Nguyen**
Name of Conference: Mycological Society of America Annual Meeting, Flagstaff, AZ.
Date of Presentation: July 2023

Title: Fungal contributions to aggregate stability in a tropical volcanic soil.
Authors (put an asterisk on the presenter): Christian Fullmer*, Andrew Linn, Jonathan Deenik, Susan Crow, **Nhu Nguyen**.
Name of Conference: Mycological Society of America Annual Meeting, Flagstaff, AZ.
Date of Presentation: July 2023

Title: Deep Fungi: Soil depth structures fungal communities in a tropical volcanic soil.
Authors (put an asterisk on the presenter): Christian Fullmer*, Tai McClellan Maaz, Casey McGrath, Susan Crow, **Nhu Nguyen**
Name of Conference: Mycological Society of America annual meeting.
Date of Presentation: 2022

Title: Identification of oxalotrophic bacteria in *Chlorophyllum molybdites* mycelial mats.
Authors (put an asterisk on the presenter): Laurens Stouthart*, Andrew Lin, **Nhu Nguyen**. (2022)
Name of Conference: Mycological Society of America annual meeting
Date of Presentation: 2022

Title: Soil nutrients vary with soil depth in tropical Oxisols
Authors (put an asterisk on the presenter): Kiana Rich*, Ishwora Dhungana, **Nhu Nguyen**
Name of Conference: Summer Undergraduate Research Experience (SURE) Symposium, University of Hawai‘i at Mānoa

Date of Presentation: 2022

Title: Development and applying high-throughput bacterial isolation from environmental samples to study oxalotrophic bacteria associated with fungal mats
Authors (put an asterisk on the presenter): Sophia Lee*, **Nhu Nguyen**
Name of Conference: Summer Undergraduate Research Experience (SURE) Symposium, University of Hawai‘i at Mānoa
Date of Presentation: 2022

Title: Machine Learning Algorithms Recognize Maize Genotypes Based on Root System Architecture
Authors (put an asterisk on the presenter): Noa Brenner*, Nicholas Carr*, India Kawelolani Ching, G'Voni Kalaiwaa, Stefano Naldini, Alanna Nguyen, Tomas Pierce, Alycia Tausaga, Jesse Mikasobe-Kealiinohomoku, Michael Kantar, Tai Maaz, Michael Muszynski, Yuriy Mileyko, **Nhu Nguyen**
Name of Conference: Summer Undergraduate Research Experience (SURE) Symposium, University of Hawai‘i at Mānoa.
Date of Presentation: 2022

Title: Maize Root Growth: Variations of Environment versus Genotype
Authors (put an asterisk on the presenter): G'Voni Kalaiwaa*, Alanna Nguyen*, Noa Brenner, Nicholas Carr, India Kawelolani Ching, Stefano Naldini, Tomas Pierce, Alycia Tausaga, Jesse Mikasobe-Kealiinohomoku, Michael Kantar, Tai Maaz, Michael Muszynski, Yuriy Mileyko, **Nhu Nguyen**.
Name of Conference: Summer Undergraduate Research Experience (SURE) Symposium, University of Hawai‘i at Mānoa.
Date of Presentation: 2022

Title: Machine Learning Techniques Can Model and Classify Phenotypic Differences in Maize Shoot Growth Rates.
Authors (put an asterisk on the presenter): India Kawelolani Ching*, Stefano Naldini*, Tomas Pierce, G'Voni Kalaiwaa, Alanna Nguyen, Noa Brenner, Nicholas Carr, Alycia Tausaga, Jesse Mikasobe-Kealiinohomoku, Michael Kantar, Tai Maaz, Michael Muszynski, Yuriy Mileyko, **Nhu Nguyen**.
Name of Conference: Summer Undergraduate Research Experience (SURE) Symposium, University of Hawai‘i at Mānoa.
Date of Presentation: 2022

Title: Enabling Analyses of Maize Genetic Diversity by Characterizing Dynamic Phenotypes of Nested Association Mapping (NAM) Panel Inbred Lines.
Authors (put an asterisk on the presenter): India Kawelolani Ching*, Stefano Naldini*, Tomas Pierce, G'Voni Kalaiwaa, Alanna Nguyen, Noa Brenner, Nicholas Carr, Alycia Tausaga, Jesse Mikasobe-Kealiinohomoku, Michael Kantar, Tai Maaz, Michael Muszynski, Yuriy Mileyko, **Nhu Nguyen**.
Name of Conference: Summer Undergraduate Research Experience (SURE) Symposium, University of Hawai‘i at Mānoa.
Date of Presentation: 2022

Title: Connecting Shoot Growth Variation to Genetic Differences in a Maize Diversity Panel.
Authors (put an asterisk on the presenter): Lydia Rigge*, Bryceson Tugade*, Livvy Johnson, Germaine Juan, Jesse Mikasobe-Kealiinohomoku, Katie Strachan, Elizabeth Swantek, Alycia Tausaga, Michael Kantar, Tai Maaz, Yuriy Mileyko, **Nhu Nguyen**, Michael Muszynski.
Name of Conference: Summer Undergraduate Research Experience (SURE) Symposium, University of Hawai‘i at Mānoa.
Date of Presentation: 2021

Title: Quantitative high-throughput characterization of genetically diverse maize root systems.
Authors (put an asterisk on the presenter): Jesse Mikasobe-Kealiinohomoku*, Katie Strachan*, Livvy Johnson, Germaine Lindsay Juan, Lydia Rigge, Elizabeth Swantek, Alycia Tausaga, Bryceson Tugade, Michael Kantar, Tai Maaz, Yuriy Mileyko, Michael Muszynski, **Nhu Nguyen**.
Name of Conference: Summer Undergraduate Research Experience (SURE) Symposium, University of Hawai‘i at Mānoa.

Date of Presentation: 2021

Title: Using Support Vector Machines to Model and Classify Phenotypic Differences in Diverse Maize Shoot Systems
Authors (put an asterisk on the presenter): Elizabeth Swantek*, Alycia Tausaga*, Livvy Johnson, Germaine Juan, Jesse Mikasobe-Kealiinohomoku, Lydia Rigge, Katie Strachan, Bryceson Tugade, Tai Maaz, Yuriy Mileyko, Michael Muszynski, **Nhu Nguyen**, Michael Kantar.
Name of Conference: Summer Undergraduate Research Experience (SURE) Symposium, University of Hawai‘i at Mānoa.
Date of Presentation: 2021

Title: Using Support Vector Machines to Model and Classify Phenotypic Differences in Diverse Maize Root Systems.
Authors (put an asterisk on the presenter): Livvy Johnson*, Germaine Lindsay Juan*, Jesse Mikasobe-Kealiinohomoku, Lydia Rigge, Katie Strachan, Elizabeth Swantek, Alycia Tausaga, Bryceson Tugade, Michael Kantar, Tai Maaz, Yuriy Mileyko, Michael Muszynski, **Nhu Nguyen**.
Name of Conference: Summer Undergraduate Research Experience (SURE) Symposium, University of Hawai‘i at Mānoa.
Date of Presentation: 2021

Title: Global introduction patterns of the pine ectomycorrhizal fungus *Suillus luteus*
Authors (put an asterisk on the presenter): Yi-Hong Ke*, Anna Bazzicalupo, Sara Branco, **Nhu Nguyen**, Joske Ruytinx, Rytas Vilgalys
Name of Conference: Joint Mycological Society of America and Botanical Society of America Meeting
Date of Presentation: 2021

Title: Cross-Kingdom Characterization of Community Dynamics and C flow in Grassland Soils.
Authors (put an asterisk on the presenter): Javier A. Ceja-Navarro*, Katerina Estera-Molina, Alyssa Byer, Aaron Chew, Daliang Ning, Kateryna Zhalnina, Mengting Yuan, Ricky W. Lewis, Nhu Nguyen, Trent Northen, Jizhong Zhou, Jennifer Pett-Ridge, Mary K. Firestone.
Name of Conference: DOE Genomic Science Meeting
Date of Presentation: 2021