

**Nhu Nguyen**  
**College of Tropical Agriculture and Human Resources**  
*Department of Tropical Plant and Soil Sciences*  
 FTE Distribution: 70% R, 30% I

**Education**

<u>Degree</u>	<u>University</u>	<u>Major</u>
Bachelor	Louisiana State University	Biological Sciences
PhD	University of California, Berkeley	Microbiology

**Professional Appointments**

<u>Title</u>	<u>Employer</u>	<u>Dates Employed</u>
Assistant Researcher	University Hawai'i at Mānoa	2016-2021
Associate Researcher	University Hawai'i at Mānoa	2021-present

**Courses Taught**

<u>Course ID</u>	<u>Credits</u>	<u>Semester/Year</u>	<u>No of Students</u>
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

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, Herrera 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

Pölme 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

Kennedy P, Gagne J\*, Pérez PE, Lofgren LA, **Nguyen NH**. 2020. Does fungal competitive ability explain host specificity or rarity in ectomycorrhizal symbioses? *PLoS ONE* 15:e0234099. DOI: 10.1371/journal.pone.0234099

Bazzicalupo A, Ruytinx J, Ke Y-H, Coninx L, Colpaert J, Nguyen NH, Vilgalys R, Branco S. 2020. Fungal heavy metal adaptation through single nucleotide polymorphisms and copy-number variation. *Molecular Ecology*, *in press*. DOI:10.1111/mec.15618

Kennedy P, Gagne J\*, Pérez PE, Lofgren LA, **Nguyen NH**. 2020. Does fungal competitive ability explain host specificity or rarity in ectomycorrhizal symbioses? *PLoS ONE*, *in press*. DOI: 10.1371/journal.pone.0234099

Bruns TD, Hale LM, **Nguyen NH**. 2019. *Rhizopogon olivaceotinctus* increases its inoculum potential in heated soil independent of competitive release from other ectomycorrhizal fungi. *Mycologia* 111: 936-941. DOI: 10.1080/00275514.2019.1657354

Wehr NH, Kinney MK, **Nguyen NH**, Giardina CP, Litton CM. 2019. Changes in soil bacterial community diversity following the removal of invasive feral pigs from a Hawaiian tropical montane wet forest. *Scientific Reports* 9:14681. doi.org/10.1038/s41598-019-48922-7

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)**

<u>Category</u>	<u>Number of Students</u>	<u>Number that Graduated</u>
Chair of Master Committees	2	1
Chair of PhD Committees	1	0
Member of Master Committees	0	0
Member of PhD Committees	3	0

### **Grant Support (Active)**

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: "Maintenance of human-associated and environmental *Burkholderia* in the soil"

Source of Grant: National Institute of Health

Dollar Value: \$563,000

Dates of Grant: 2/1/2021 – 7/30/2023

Role: PI

Title of Grant: Cross-Kingdom Interactions: The Foundation for Nutrient Cycling in Grassland Soils  
Source of Grant: Department of Energy  
Dollar Value: \$3,750,000 (UH portion \$298,000)  
Dates of Grant: 8/1/2019 - 7/31/2023  
Role: Co-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 - 9/30/2025  
Role: PI

### **Presentations at Conferences (last 4 years)**

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

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: 2019

Title: A genome atlas of the ectomycorrhizal genus *Suillus*: A model for fungus-plant mutualism belowground  
Authors (put an asterisk on the presenter): **Nhu Nguyen\***, Lotus Lofgren, Anna Bazzicalupo, Joske Ruytinx, Hui-Ling Liao, Ko-Hsuan Chen, Amanda Certano, J. Alejandro Rojas, Yi Hong Ke, Looney Brian, H. Van T. Cotter, Jan Colpaert, Alan Kuo, Kerrie Barry, Igor Grigoriev, Thomas Bruns, Sara Branco, Peter Kennedy, Rytas Vilgalys.  
Name of Conference: Mycological Society of America Annual Meeting  
Date of Presentation: 2019

Title: Genomic signatures of host specificity in ectomycorrhizal fungi  
Authors (put an asterisk on the presenter): Lotus Lofgren\*, Rytas Vilgalys, **Nhu Nguyen**, Hui-Ling Liao, Kerrie Barry, Igor Grigoriev, Alan Kuo, Peter Kennedy  
Name of Conference: Mycological Society of America Annual Meeting  
Date of Presentation: 2019

Title: Evolution of heavy metal tolerance in a mycorrhizal fungus  
Authors (put an asterisk on the presenter): Anna Bazzicalupo\*, Yi-Hong Ke, Joske Ruytinx, Laura Coninx, Jan Colpaert, **Nhu Nguyen**, Rytas Vilgalys, Sara Branco  
Name of Conference: Mycological Society of America Annual Meeting  
Date of Presentation: 2019

## **Poster Presentations**

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 Prasad, 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 Prasad, 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 Prasad, 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 Prasad, 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 Prasad, 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 Prasad\*, **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

Title: Population genomic study of an introduced 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: Mycological Society of America Annual Meeting

Date of Presentation: 2019

Title: How specific is ectomycorrhizal host specificity

Authors (put an asterisk on the presenter): Joe Gagne\*, Amanda Certano, **Nhu Nguyen**, Lotus Lofgren, Peter Kennedy

Name of Conference: Mycological Society of America Annual Meeting



Date of Presentation: 2019

Title: Interactive Feedbacks of Climate, Mineralogy and Microbiological Communities on Soil Carbon: A Deep Soil Warming Experiment

Authors (put an asterisk on the presenter): McGrath C\*, Pries CH, Glazer BT, Lio SHI, Crow SE, **Nguyen NH**

Name of Conference: American Geophysical Union Annual Meeting

Date of Presentation: 2019

Title: Changes in soil microbial community structure mediated by plant species and continuous monocropping

Authors (put an asterisk on the presenter): Dhungana I\*, **Nguyen NH**

Name of Conference: Rhizosphere5

Date of Presentation: 2019

Title: The legacy of intensive land use on soil health and function.

Authors (put an asterisk on the presenter): Hubanks HL, Deenik JL, Glazer CJT, Vizka E, **Nguyen NH**, Crow SE\*

Name of Conference: European Geophysical Union Annual Meeting

Date of Presentation: 2019

Title: Genomic Signatures of Ectomycorrhizal Host Specificity

Authors (put an asterisk on the presenter): Lofgren LA\*, Vilgalys R, **Nguyen NH**, Liao H, Ruytinx J, Kennedy PG

Name of Conference: 30<sup>th</sup> Fungal Genetics Conference

Date of Presentation: 2019

Title: A genome atlas of the mycorrhizal genus Suillus: a model for plant-fungus mutualism belowground Patterns of host specificity

Authors (put an asterisk on the presenter): **Nguyen NH\***, Bazzicalupo A, Lofgren L, Ruytinx J, Liao H, Chen K, Certano A, Rojas JA, Ke YH, Looney B, et al.

Name of Conference: Maize Genetics Annual Conference

Date of Presentation: 2019

Title: A genome atlas of the mycorrhizal genus Suillus: a model for plant-fungus mutualism belowground Patterns of host specificity

Authors (put an asterisk on the presenter): **Nguyen NH\***, Bazzicalupo A, Lofgren L, Ruytinx J, Liao H, Chen K, Certano A, Rojas JA, Ke YH, Looney B, et al.

Name of Conference: Genomics of Energy & Environment Annual Meeting

Date of Presentation: 2019

Title: Evolution of heavy metal tolerance in a mycorrhizal fungus

Authors (put an asterisk on the presenter): Anna Bazzicalupo\*, Yi-Hong Ke, Joske Ruytinx, Laura Coninx, Jan Colpaert, **Nhu Nguyen**, Rytas Vilgalys, Sara Branco

Name of Conference: DOE Genomics of Energy & Environment Annual Meeting

Date of Presentation: 2019