Limeng (Momo) Xie

Athens, GA, USA

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{r setup, include=FALSE} library(tidyverse) library(vitae) knitr::opts_chunk$set(echo = FALSE)
```

Education

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{r education} tribble(   ~ degree, ~ uni, ~ loc, ~ dates, ~ details,   "Phd student in Plant
Biology, GPA 4.00", "University of Georgia (UGA)", "Athens, GA", "2018 – Present", "Advisor:
Dr. Alexander Bucksch, Computational Plant Science Lab",   "Master in Horticultural Science,
GPA 3.81", "Texas A&M University (TAMU)", "College Station, TX", "2014 – 2016", "Certificate
in Applied Statistics",   "Master in Horticultural Science, GPA 3.81", "Texas A&M University
(TAMU)", "College Station, TX", "2014 – 2016","Advisors: Dr.Kevin Crosby & Dr.John Jifon, Vegetab
Breeding Lab",   "Master in Horticultural Science, GPA 3.81", "Texas A&M University (TAMU)",
"College Station, TX", "2014 – 2016", "Thesis: SNP Discovery and Mapping QTLs Associated with
Root Traits and Morphological Traits in Tomato",   "Bachelor in Agronomy, GPA 3.65", "China
Agricultural University (CAU)", "Beijing, China", "2009 – 2014", "Thesis: Evaluation of Methane
Production in Anaerobic Reactor with Sweet Potato Vine and Dairy Manure",   "Exchange Student",
"Saga University", "Kyushu, Japan", "2011 – 2012", "Major in Plant` Science and Japanese" )
%>%   detailed_entries(degree, dates, uni, loc, details)
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Publications

Xie, L.,Burridge,J., Klepp, N., Miller, J., Lynch, J.P., Bucksch, A., Phenotypic spectrum: uncovering root architecture diversity in common bean (*Phaseolus vulgaris L.*) *In prep*

Xie, L., Klein, P., Crosby, K., & Jifon, J. (2019). A Genotyping-by-sequencing Single Nucleotide Polymorphism Map and Genetic Analysis of Root Traits in an Interspecific Tomato Population, *Journal of the American Society for Horticultural Science* 144(6), 394-404.

Presentations

2020 **Xie, L.**,Burridge,J., Klepp, N., Miller, J.,Lynch, J.P., Bucksch, A., **the 7th International Horticulture Research Conference**, *Poster*: Quantifying diversity of root architecture types within a genotype of common bean (*Phaseolus vulgaris .L*), Online

2019 **Xie, L.**, Bucksch, A., **International Plant Phenotyping Symposium**, *Poster*: The shape of plants revealed: A shape theoretic perspective on statistics of trait measurements, Nanjing, China

2019 **Xie, L.**,Burridge,J., Klepp, N., Miller, J., Chutoe, C., Saengwilai, P., Lynch, J.P., Bucksch, A., **Crops Conference**, *Poster*:The Phenotypic Spectrum: Identifying Whole Role Architecture Types in Genotypes of Common Bean (*Phaseolus vulgaris .L*), Huntsville, AL

2018 **Xie, L.**, Liu, S, Bucksch., A., **Plant Center Fall Retreat**, *Poster*: Extracting Traits from 3D Models of Maize Root System Architecture", Unicoi State Park, GA

2017 **Xie, L.**, Klein, P., Crosby, K., & Jifon, J., **American Society of Horticultural Science Annual Meeting**, *Talk*: "Mapping Novel QTLs Associated with Root Morphological Traits in an Interspecific Tomato Population, Waikoloa, HI

2016 **Xie, L.**, Klein, P., Crosby, K., & Jifon, J., **Annual Meeting of Texas Plant Protection Association**, *Poster*: SNP Discovery and QTL Mapping for Root Related Traits in an Interspecific Tomato Population, Bryan, TX

2015 **Xie, L.**, Crosby, K., & Jifon, J.,**Annual Meeting of Texas Plant Protection Association**, *Poster*: Estimates of Genetic Variance for Drought Tolerance Traits in Tomato, Bryan, TX

2015 **Xie, L.**, Crosby, K., & Jifon, J., **American Society of Horticultural Science Annual Meeting**, *Poster*: Estimates of Genetic Variance for Drought Tolerance Traits in Tomato, New Orleans, LA

Awards

2020 Jaworski Travel Award, Department of Plant Biology, UGA
2020 Travel Scholarship for Root Short Course, University of Floria
2016 Outstanding Graduate Student Award, Texas Plant Protection Association
2013 Third Prize Scholarship for Academic Excellence, CAU
2012 Japan Student Service Scholarship, Japan Student Service Organization
2011 Third Prize Scholarship for Academic Excellence, CAU
2010 Second Prize Scholarship for Academic Excellenc, CAU
2010 National Scholarship for Encouragement, Ministry of Education in China
2010 Merit Undergrate Student Award, CAU

Resrarch Experience

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{r research} tribble(   ~ positon, ~ uni, ~ loc, ~ dates, ~ details,   "Graduate Reserch Assistan
"Computational Plant Science Lab, UGA", "Athens, GA", "2018 - Present", "Current project: The
phenotypic spectrum: quantifying the diversity of root architecture in common bean",   "Graduate
Reserch Assistant", "Computational Plant Science Lab, UGA", "Athens, GA", "2018 - Present",
"Rotation projects: Developed an image processing pipeline to automatically extract root traits
from 3D models of maize root system",   "Graduate Reserch Assistant", "Computational Plant
Science Lab, UGA", "Athens, GA", "2018 - Present", "Rotation projects: Identified potential
genetic regions with insulators in Bladderwort by analyzing a public RNA-sea database",   "Gradua
Reserch Assistant", "Computational Plant Science Lab, UGA", "Athens, GA", "2018 - Present",
"Rotation projects: Explored genetic variation of volatile content among 150 tomato accessions
(wild, semi-domesticated, domesticated).",   "Lab Techician", "Vegetable Breeding Lab, TAMU",
"College Station, TX", "2017", "Conducted all daily operations including plant, fertilize, trelli
prune, IPM, supplies and asset acquisition to complete short term and long breeding  goals over
7 greenhouses and acre-size field",   "Lab Techician", "Vegetable Breeding Lab, TAMU", "College
Station, TX", "2017", "Established greenhouse trials of grafted tomatoes to study yield performan
in relation to various rootstock and scion combinations",   "Lab Techician","Vegetable Breeding
Lab, TAMU", "College Station, TX", "2017", "Screened pepper hybrids for thrip resistance and
performed hybrid testing at multiple locations across Texas",   "Lab Techician", "Vegetable
Breeding Lab, TAMU", "College Station, TX", "2017", "Crossed pepper, tomato, melon and squash
to produce hybrid seed.",   "Graduate Research Assistant", "Vegetable Breeding Lab, TAMU", "Colleg
Station, TX", "2014-2016", "Measure morphological root traits using the WinRhizo software",
"Graduate Research Assistant", "Vegetable Breeding Lab, TAMU", "College Station, TX", "2014-2016"
"Extracted, purified, and quantified tomato DNA for GBS library",   "Graduate Research Assistant"
"Vegetable Breeding Lab, TAMU", "College Station, TX", "2014-2016", "Constructed linkage map
for mapping population using R/qtl, AsMap, and Joinmap",   "Graduate Research Assistant", "Vegeta
Breeding Lab, TAMU", "College Station, TX", "2014-2016", "Mapped 29 QTLs for 12 root and shoot
traits using R/qtl, WinQTLCartographer, MapQTL and QTLNetworks",   "Undergraduate Research
Assistant", "Biomass Engineering Lab, CAU", "Beijing, China", "2012-2014", "Reutilized agricultur
wastse, e.g. dairy manure and sweetpotato vine, into clean and renewable energy",   "Undergraduat
Research Assistant", "Biomass Engineering Lab, CAU", "Beijing, China", "2012-2014", "Evaluated
the volatile fat acid of effluent using HPLC",   "Undergraduate Research Assistant", "Biomass
Engineering Lab, CAU", "Beijing, China", "2012-2014", "Observed dairy manure and sweetpotato
vine at a ration of 2:8 could have  as stable methane production"   )%>% detailed_entries(positon
dates, uni, loc, details)
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Teaching & Mentoring

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{r tutoring} tribble(   ~ role, ~ uni, ~ campus, ~ dates, ~ details,   "Teaching Assistant",
"University of Georgia", "Athens, GA", "2019 Fall", "Concepts in Biology (BIOL1103), ~70 students
"Teaching Assistant", "University of Georgia", "Athens, GA", "2019 Fall", "Presented lectures
for 3 lab session during semester",   "Teaching Assistant", "University of Georgia", "Athens,
GA", "2019 Fall", "Lead field trip and graded assigned homework for class",   "Teaching Assistan
"University of Georgia", "Athens, GA", "2019 Fall", "Achieved overall student approval rating
of 4.38 on 5 point scale",   "Mentor", "University of Georgia", "Athens, GA", "2020 Summer",
"Lilly Adams, REU Project: Developing a new image processing pipeline to extract root trait
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of Arabidopsis and identifying candidate genes for root traits from GWAS",   "Mentor", "Universit
of Georgia", "Athens, GA", "2020 Summer", "Joslyn Mcklveen, CURO Project: Analyze the effect
of temperature and humidity on plant development on a newly-developed mesocosm system",   "Mentor
"Texas A&M University", "College Station, TX", "May 2017 - Dec 2017", "Trained 8 undergraduates
of pepper and tomato breeding") %>%   detailed_entries(role, dates, uni, campus, details)

Agricultural Extension

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{r extension} tribble(   ~ positon, ~ uni, ~ loc, ~ dates, ~ details,   "Intern", "Center for
Chinese Agricultural Policy (CCAP)", "Beijing, China", "Aug 2011", "Participated the Farmer
Field School Promotion Project led by CCAP, Ministry of Agriculture, and Rand Corporation (US)",
"Intern", "Center for Chinese Agricultural Policy (CCAP)", "Beijing, China", "Aug 2011", "Investi
application of pesticides and fertilizers in tomato productions in Hubei Province",      "Intern"
"Center for Chinese Agricultural Policy (CCAP)", "Beijing, China", "Aug 2011", "Surveyed farmers
in three villages and analyzed the questionare data",   "Co-leader, Summer Field Program", "China
Agricultural University", "Beijing, China", "June 2011", "Investigated the overuse of additives
in the daylily industry in Qidong County",      "Co-leader, Summer Field Program", "China Agricult
University", "Beijing, China", "June 2011", "Surveyed with local farmers and small business
owners (>200 people)",    "Co-leader, Summer Field Program", "China Agricultural University",
"Beijing, China", "June 2011", "Presented results to the local government and appeared on the
local media",    "Co-leader, Summer Field Program", "China Agricultural University", "Beijing,
China", "June 2011", "Organized a workshop introducing alternative methods to preserve daylily
for farmers ",   "Co-leader, Summer Field Program", "China Agricultural University", "Beijing,
China", "June 2011", "Won the Excellent Investigators Team Award ",   )%>% detailed_entries(posit
dates, uni, loc, details)
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Synergistic Activities

2020 Judge Lead for Junior Section of 72nd Georgia Science & Engineering Fair
2019 Judge for Senior Section of 72nd Georgia Science & Engineering Fair
2019 Executive Board Member of Chinese Genomics Online Meet-up | Responsible for inviting guest speakers and technical support for live stream 2018 Volunteer for March for Science at Washington, DC
2015 Secretary, Texas A&M Horticulture Graduate Student Council
2015 Volunteer, Texas A&M Plant Breeding Symposium
2012 Spearker, Introduction of Chinese Culture with local schools in Ichikikushikino-shi, kagoshima, Japan
2011 CAU Ambassador, Student representative for university-wide foreign affair activities, CAU
2010 Scrum Half Player of College Rugby Team | Won the plateclass champion of college wide games, CAU