Jaya Nepal

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| +1-352-327-1829 |
| Postdoctoral associate |
| School of Integrated Plant Science | Soil and Crop Section |
| Cornell University |
| 509 Bradfield Hall, 306 Tower Road, Ithaca, New York, 14850 |

EDUCATION

PhD (Soil and Water Sciences) **University of Florida** **Dec, 2023**

Dissertation: Evaluating the potential of biochar and carbon nanomaterials for crop production and implications on plants, soils, and environment.

MS (Int'l Agricultural Development) **University of Tokyo** **Sept, 2019**

Dissertation: Elucidation of optimum use of calcined phosphate rock fertilizer for sorghum using crop growth model (APSIM) under semi-arid environments in Burkina Faso.

BS (Agriculture) **Tribhuvan University** **Sept, 2015**

Dissertation: Effect of biochar from different origins on physio-chemical properties of soil and yield of garden pea at Paklihawa, Rupandehi, Nepal.

PROFESSIONAL EXPERIENCE

Postdoctoral Associate (Jan. 2024-Present)
Cornell University, USA
Key responsibilities: Assistance in field projects (soil, weed, and crop sampling, data analysis, writing, syntheses, extension activities, mentoring graduate and undergraduate students, and teaching.

Projects:

- Assessing soil health in Cornell's long-term organic grains cropping systems experiment (OGGS)
  Roles: Soil sampling, Data synthesis, analysis and writing.
- Integrated cover crop experiment (ICCE) for white mold, weed and agronomic management of soybean and dry bean
  Roles: Data synthesis, analysis and writing.
- Taking Tillage Out of Organic Grain Crop Production with Ecology, Tools, and Technology
  Roles: Data synthesis, analysis and writing.
- Assessing Yield Gaps in No-till Cropping Systems
  Roles: Mentoring graduate student, assisting in data synthesis and crop modelling using APSIM.
- Book chapter: Warm season gramineous cover crops. In Cover crops for sustainable soil management. Editors Prof. Sjoerd W. Duiker and Dr Andy Clark.
  Roles: First Draft, Review and collaboration. Shooting cover crops seed and seedling images.

CERTIFICATIONS

Sustainable Agriculture and Land management. University of Florida. Coursera. April 2020. (Certificate)

Cornell Advanced Soil Health Training, 2023. Cornell University. Dec 2023. (Certificate)

APSIM Training Course: Evaluating Production and Environmental Performance of Cropping Systems with APSIM, 2024. Iowa State University. (Certificate)

PUBLICATIONS

First author and shared first authorship:

Nepal, J.; Xin, X.; Maltais-Landry, G.; Ahmad, W.; Wright, A.L.; Ogram, A.; Stoffella, P.J. and He, Z. (2024) Comparing Carbon Nanomaterial and Biochar as Soil Amendment in Field: Influences on Soil Biochemical Properties in Coarse-Textured Soils. *Nutrient Cycling in Agroecosystems.* https://doi.org/10.1007/s10705-024-10393-2

Nepal, J., Xin, X., Maltais-Landry, G., Ferreira, J. B. N., Wright, A. L., & He, Z. (2024). Water dispersible carbon nanomaterials reduced N, P, and K leaching potential in sandy soils: A column leaching study. *Science of The Total Environment*, 176755. https://doi.org/10.1016/j.scitotenv.2024.176755

Nepal, J.; Xin, X.; Maltais-Landry, G.; Ahmad, W.; Pereira J.; Santra, S.; Wright, A.L., Ogram, A.; Stofella, P.J.; and He Z.L. (2023) Carbon nanomaterials are superior soil amendment for sandy soils than biochar based on impacts on lettuce growth, physiology and soil biochemical quality. *NanoImpact* https://doi.org/10.1016/j.impact.2023.100480

Nepal, J.; Xin, X.; Maltais-Landry, G.; Wright, A. L.; Stoffella, P. J.; Ahmad, W.; & He, Z. L. (2022). Water-dispersible carbon nanomaterials improve lettuce (*Latuca sativa*) growth and enhance soil biochemical quality at low to medium application rates. *Plant and Soil*, 1-19. https://doi.org/10.1007/s11104-022-05852-0

Nepal, J.; Ahmad W.; Munsif, F.; Khan, A.; Zou, Z. (2023) Advances and prospects of biochar in improving soil fertility, biochemical quality, and environmental applications. *Frontiers in Environmental Science.* https://doi.org/10.3389/fenvs.2023.1114752

Ahmad, W.; **Nepal, J.;** Xin, X. and He, Z.L. (2023) Agronomic Zn biofortification through nano ZnO application boosted growth, photosystem efficiency, Zn and P nutrition in maize. *Archives of Agronomy and Soil Science* https://doi.org/10.1080/03650340.2023.2231350

Nepal J.; Idriss S.; Batienon A.I.; Okada K. 2019. Calibration and validation of APSIM-Sorghum model in the yield response to phosphorus fertilizers in the semi-arid conditions in Burkina Faso, *J-Stage journal*, 2019 https://www.jstage.jst.go.jp/article/jcsproc/247/0/247_27/_article/-char/en

Co-authored papers:

Xin, X.; **Nepal, J**.; Shohag, J.I.; Cardoso de Souza; J.; He, S.; Ahmad, W.; Scully, B. and He, Z. (2024) Enhancing Corn Growth and Nutrient Uptake Using Carbon Nanoparticles Derived from Carbon Black: A Two-Year Field Study" *Journal of Soil Science and Plant Nutrition. (In press)*

Xin, X.; Farid, G.; **Nepal, J**; He, S.; Yang, X. and He, Z. (2024). Comparative effectiveness of carbon nanoparticles and biochar in alleviating copper stress in corn (Zea mays L.). *Chemosphere*, 355, 141745. https://doi.org/10.1016/j.chemosphere.2024.141745

Ahmad, I.; Ahmad, W.; **Nepal, J.;** Junaid, M. B.; Bukhari, N. A.; Usman, M.; ... & Khan, R. N. (2024). Synergistic Enhancement of Maize Crop Yield and Nutrient Assimilation via ZnO Nanoparticles and Phosphorus Fertilization. *Journal of the Science of Food and Agriculture.* https://doi.org/10.1002/jsfa.13500

Khan, W.; Zhu, Y.; Khan, A.; Zhao, L.; Yang, Y. M.; Wang, N.; Hao, M.; Ma, Y.; **Nepal, J**.; Ullah, F.; Rehman, M.M.; Abrar, M. & Xiong, Y. C. (2024). Above-and below-ground feedback loop of maize is jointly enhanced by plant growth-promoting rhizobacteria and arbuscular mycorrhizal fungi in drier soil. *Science of The Total Environment,* 917, 170417. https://doi.org/10.1016/j.scitotenv.2024.170417

Ahmad, W., **Nepal, J.,** Munsif, F., Khan, A., Ahmad, I., Zaheer, S., ... & Zou, Z. (2023) Biochar particle size coupled with biofertilizer enhances carbon and nitrogen microbial pools and CO2 sequestration in lentil. *Frontiers in Environmental Science*, 11, 1114728. https://www.frontiersin.org/articles/10.3389/fenvs.2023.1114728/full

Xin, X.; **Nepal, J.**; Wright, A. L.; Yang, X.; & He, Z. (2022). Carbon nanoparticles improve corn (*Zea mays L.*) growth and soil quality: Comparison of foliar spray and soil drench application. *Journal of Cleaner Production*, 132630. https://doi.org/10.1016/j.jclepro.2022.132630

Khan, A., Jie, Z., Wang, J., **Nepal, J.,** Ullah, N., Zhao, Z. Y., ... & Xiong, Y. C. (2023). Ecological risks of microplastics contamination with green solutions and future perspectives. *Science of The Total Environment*, 165688. https://doi.org/10.1016/j.scitotenv.2023.165688

Ali, A.; Ahmad, W.; Munsif, F.; Khan, A.; **Nepal, J**., Wójcik-Gront, E.; ... & Jin, G. (2022). Residual Effect of Finely-Ground Biochar Inoculated with Bio-Fertilization Impact on Productivity in a Lentil–Maize Cropping System. Agronomy, 12(9), 2036. https://doi.org/10.3390/agronomy12092036

Asim, M.; Ahmad, W.; Qamar, Z.; Awais, M; **Nepal, J.**; & Ahmad, I. (2022). Seed Coating with Zinc Oxide Nanofiber (ZnONF) and Urea Improved Zinc Uptake; Recovery Efficiency, Growth, and Yield of Bread Wheat (*Triticum aestivum* L.). *Journal of Soil Science and Plant Nutrition*, *22*(4), 5009-5020. https://doi.org/10.1007/s42729-022-00978-7

Bhattarai, B.; Neupane, J.; Dhakal, S. P.; **Nepal, J**.; Gnyawali, B.; Timalsina, R.; & Poudel, A. (2015). Effect of Biochar from Different Origin on Physio-Chemical Properties of Soil and Yield of Garden Pea (Pisum sativum L.) at Paklihawa, Rupandehi, Nepal. *World Journal of Agricultural Research*, *3*(4), 129-138. http://pubs.sciepub.com/wjar/3/4/3

Khan, A.; Xiaojua, S.; Xianzhe, H.; Nannan, L.; Junhong, Li; Feng, S.; **Nepal, J;** Jun, W. & Luo, H. (2023) Increase in cotton yield through improved leaf physiological functioning under the soil condition of reduced chemical fertilization compensated by the enhanced organic liquid fertilization. *Frontiers in Plant Science (Crop and Product Physiology)* https://doi.org/10.3389/fpls.2023.1220585

SUBMITTED MANUSCRIPT AND BOOK CHAPTER

Ahmad, W.; **Nepal, J.;** Xin, X.; Nadeem, M. and He, Z. (2024) Nano Zinc Oxide Enhances Corn Growth: Comparison between Soil Drench and Seed Coating Applications in Alkaline Sandy Soils" *Journal of Soil Science and Plant Nutrition. Status: Minor Revision (submitted)*

Ryan, M.R.; **Nepal J.,** Silva, E.M. and Rose, T. J. (2025) Warm season gramineous cover crops. In Book: Cover crops for sustainable soil management. Editors Prof. Sjoerd W. Duiker and Dr Andy Clark. (Status: Invited chapter; *first draft submitted*)

SUBMITTED GRANT

Nepal J., Thapa, R., Ryan, M. and McDonald A. (Submitted, 2024). Evaluating and Enhancing Resilience of Sustainable Cropping Systems: A Decision Support Tool (DST) for Climate-Smart Adaptive Management. Cornell Atkinson Postdoctoral Grant. ~$1.584-$2.376M
Roles: Ideation, First Draft, Review and Editing, and Submission.

PEER REVIEW

Agronomy Journal (1)

EDIS Publication (1)

Journal of Cleaner Production (3)

Journal of Soil Science and Plant Nutrition (2)

Agriculture and Food Security (2)

Scientific reports (2)

Frontiers in Environmental Science (2)

Journal of Environmental Quality (1)

BMC biology (1)

SCIENTIFIC PRESENTATIONS

Nepal, J.; Pethybridge, S. and Ryan, M. (2024) Mulch from Rolled-Crimped Cereal Rye Suppresses White Mold and Weeds in Organic No-till Planted Soybean and Dry Bean. ASA, CSSA, SSSA International Annual Meeting-2024. San. Antonio, TX. Nov 10 – Nov 13, 2024. (Oral, presenter). https://scisoc.confex.com/scisoc/2024am/meetingapp.cgi/Paper/158220

Wallace, S.; Brockmueller, B.; Pelzer, C.J.; Wayman, S.; **Nepal, J.;** Pethybridge, S.; Silva, E.M. and Ryan, M. Precipitation at Planting Drives Yield Gap in Organic No-till Soybean Production. ASA, CSSA, SSSA International Annual Meeting-2024. San. Antonio, TX. Nov 10 – Nov 13, 2024. (Oral, contributor). https://scisoc.confex.com/scisoc/2024am/meetingapp.cgi/Paper/161213

Xiaoping, X.; **Nepal, J.**; Li., S. and He, Z. (2024) Enhancing Corn Growth and Nutrient Uptake Using Carbon Nanoparticles Derived from Carbon Black: A Two-Year Field Study (Poster, contributor) https://scisoc.confex.com/scisoc/2024am/meetingapp.cgi/Paper/158712

Nepal, J.; Pelzer, C.; Wayman, S.; and Ryan, M.R. (2024). Insights into Soil Health from the Cornell Organic Grains Cropping Systems (OGCS) Experiment. SSSA 2024 Bouyoucos Summer Conference. San Juan, Puerto Rico. https://www.sacmeetings.org/ (Poster, presenter)

Nepal, J.; Xin, X.; Maltais-Landry, G. & He, Z. (2023). Carbon Nanomaterials Vs Biochar as Soil Amendment in Sandy Soils: Agronomic Performance and Implications to Soil Biochemical Quality. ASA, CSSA, SSSA International Annual Meeting-2023. St. Louis, MO. Oct 29 – Nov 1, 2023. (Oral, presenter) https://scisoc.confex.com/scisoc/2023am/meetingapp.cgi/Paper/149689

Nepal, J.; Xin, X.; Maltais-Landry, G.; Pereira J.; Santra, S. & He, Z. (2023). Using novel carboxyl-functionalized carbon nanoparticles as a soil amendment for sandy-acidic soils. *Nano Florida Conference 2023.* March 1-3. University of Central Florida, Orlando, FL. (Oral, presenter). https://nanoscience.ucf.edu/nanoflorida/

Xin, X.; **Nepal, J.** & He, Z. (2023). Nanoparticles from Carbon Black: Enhancing Plant Growth and Soil Fertility from Greenhouse to Field Studies. ASA, CSSA, SSSA International Annual Meeting-2023. St. Louis, MO. Oct 29 – Nov 1, 2023. (Oral, contributor) https://scisoc.confex.com/scisoc/2023am/meetingapp.cgi/Paper/149695

Nepal J., Xin X. and He, Z. (2023). Special Session--Nano-Enabled Agriculture: Prospects and Challenges across Crop and Soil Sciences (Oral, organizer and presenter) https://scisoc.confex.com/scisoc/2023am/meetingapp.cgi/Session/25063

Nepal J., Ahmad. W.; Munsif, F.; Farooq, U.; Sharif, M. and He, Z. (2023). Leveraging Carbon and Zinc Nanoparticles for Crop Nutrition and Biofortification of Field Crops (Oral, presenter). https://scisoc.confex.com/scisoc/2023am/meetingapp.cgi/Paper/149094

Nepal, J.; Xin, X.; Maltais-Landry, G. & He, Z. (2022). Do Carbon Nanomaterials Improve Soil Nutrient Availability in Field Conditions? *ASA, CSSA, SSSA International Annual Meeting-2022.* Baltimore, MD. Nov 6-9, 2022. (Oral and Poster, presenter). https://scisoc.confex.com/scisoc/2022am/meetingapp.cgi/Paper/141911

Nepal, J.; Xin, X.; Maltais-Landry, G. & He, Z. (2022). Water-dispersible carbon nanomaterials improve lettuce (*Latuca sativa*) growth & enhance soil biochemical quality at low-medium rates. *Materials Innovation for Sustainable Agriculture (MISA) annual symposium*, October 24-25, University of Central Florida, Orlando, FL. (Poster, presenter). https://nanoscience.ucf.edu/misa/wp-content/uploads/sites/20/2023/05/MISA-symposium-program-2022-full.pdf

Nepal, J.; Ahmad, W.; Xin, X. & He, Z. (2021). Nano Zinc-Oxide Enhanced Photosynthetic Apparatus and Efficiency of Corn (Zea mays L.) in Sandy-Acidic Soils. *ASA, CSSA, SSSA International Annual Meeting-2021.* Salt Lake City, UT. https://scisoc.confex.com/scisoc/2021am/meetingapp.cgi/Paper/135963. (Poster, presenter).

Nepal, J.; Xin, X.; Maltais-Landry, G. & He, Z. (2021). Evaluation of Carbon Nanomaterial Impact on Soil Biochemical Properties in Acidic-Sandy Florida Spodosols. *ASA, CSSA, SSSA International Annual Meeting*-2021. Salt Lake City, UT. (Oral, presenter). https://scisoc.confex.com/scisoc/2021am/meetingapp.cgi/Paper/135843.

Xin, X.; **Nepal, J.** & He, Z. (2021). Comparative Efficiency of Carbon Nanoparticles on Corn (Zea mays L.) Growth with Foliar Spray and Soil Drench Applications. *ASA, CSSA, SSSA International Annual Meeting*-2021. Salt Lake City, UT. (Poster, co- presenter). https://scisoc.confex.com/scisoc/2021am/meetingapp.cgi/Paper/135839.

Nepal, J.; Guo, Z.; Mao, X.; Maltais-Landry, G. & He, Z. (2020). Use of Organic Amendments to Enhance Agronomic Effectiveness of Activated Dolomite Phosphate Rock Fertilizers. *ASA, CSSA, and SSSA International Annual Meeting-2020.* Virtual. (Oral, presenter). https://scisoc.confex.com/scisoc/2020am/meetingapp.cgi/Paper/124743.

Nepal J.; Idriss S.; Batienon A.I. & Okada K. (2019). Effect of calcined phosphate rock compared to TSP on biomass and yield of rainfed sorghum (Sorghum bicolor var. Kapelga) in the semi-arid condition at Kamboinse, Burkina Faso, 247th *Crop Science Society of Japan, (CSSJ) Annual Conference*, Tsukuba, Japan. March 28th-29th, 2019. (Oral, presenter). http://www.cropscience.jp/meeting/247/program_a.pdf.

Nepal J.; Bhattarai B.; Neupane J.; Dhakal S.P.; Gnyawali B.; Timalsina R. & Poudel A. (2017). Evaluation of different substrate biochar production and its impact on soil properties. *South Asian Biotechnology Conference*. March 16th-18th Kathmandu, Nepal (Poster, presenter).

Nepal J., Bhattarai B. and Neupane J. Effect of Biochar from Different Origin on Physio-Chemical Properties of Soil and Yield of Garden Pea (*Pisum sativum* L.) at Paklihawa, Rupandehi, Nepal. *International Conference on Biodiversity, Climate Change Assessment and Impacts in Livelihood (ICBCL)*, Kathmandu, Nepal. Jan 10th-12th, 2017. (Oral, presenter).

RESEARCH SKILLS AND EXPERIENCE

- Extensive research experience in soil health, fertility, health and nutrient management in different agroecosystems.
- Design and implementation of research projects—greenhouse, lab and field experiments.
- Experience of soil sampling and data collection for chemical and biological analyses.
  - Analysis for soil pH and EC (pH/EC meter); KCl extracted nitrate/ammonia N, (Spectrophotometer); Mehlich 3 extracted P, K, Mg, Ca, micronutrients and heavy metals (ICP-OES); Olsen P (Spectrophotometer); Total C:N (C/N analyzer); plants tissue (nitric acid) extraction for nutrient analysis.
  - Analysis for soil biological soil health indicators: microbial respiration (basal respiration/CO_2 burst method), microbial biomass carbon (fumigation-extraction method), soil enzymes (urease, phosphatase and dehydrogenase), active carbon (permanganate-oxidizable carbon (POXC).
- Experience of soil DNA extraction (Qiagen DNeasy PowerSoil) and bioinformatics (Qiime 2 for soil microbiome taxonomical identification, alpha and beta diversity).
- Analysis on factorial research models, regression modeling and correlations.
- Experience of Microsoft Office packages for writing, presentations, data analysis and graph preparation.
- Experience of using R, Statistix and Origin Pro software for data analysis.
- Experience of using R (ggplot), Sigma plot, GraphPad Prism and Origin Pro software for plotting graphs and multivariate analyses.
- Experience of training undergraduate interns, graduate students and visiting scholars with lab protocols and management.
- Develop oral and poster presentations for conferences and workshops, and extension talk for field days.
- Write manuscripts for publication in scientific peer review journals and reports to funding institutions.

HONORS, AWARDS and TRAVEL GRANTS:

- CALS International Student Outstanding Achievement Award 2023
- Alec Courtelis International Student Award nominee (PhD), 2023
- A.S. Herlong Sr. Graduate Scholarship ($2000) College of Ag. & Life Sc. (CALS) UF, 2023.
- ASA-CSSA-SSSA Encompass Fellow sponsored by Bayer Crop Science (2022-23).
- ASA-CSSA-SSSA Scientists Engaging in Educating Decision makers (SEED) ambassador (2022-23).
- Sam Polston fellowship ($1000)- Soil, Water and Ecosystem Sciences, UF, 2023.
- UF Office of Research- UF Research award ($400) ASA, CSSA, SSSA Int'l Annual, 2022.
- UF-SWESD travel award ($100) to attend 2022 ASA, CSSA, SSSA Int'l Annual Meeting 2022.
- UF-IRREC travel award ($300) to attend 2022 ASA, CSSA, SSSA Int'l Annual Meeting, 2022.
- UF-IFAS travel award ($250) to attend 2022 ASA, CSSA, SSSA Int'l Annual Meeting, 2022.
- UF-GSC travel award ($350) to attend 2021 ASA, CSSA, SSSA Int'l Annual Meeting, 2021.
- ASA-CSSA-SSSA graduate student leadership conference participation, 2020 and 2022.
- Graduate Student Assistantship, Ph.D. Soil and Water Sciences, 2020-24.
- Japanese Govt. MEXT Scholarship, MS Int'l Ag. Dev. Studies | University of Tokyo, 2017-19.
- University Merit Scholarship | Inst. Of Ag. & Animal Sciences | Tribhuvan University, 2011-15.

TEACHING AND MENTORING EXPERIENCE

- Teaching and mentoring at Cornell University

- Guest Lecture: Soil Health and Sustainability (PLSCI 1900: Sustainable Agriculture: Food, Farming, and the Future)
- Student mentoring: Sam Wallace (MS student, Sustainable Cropping Systems lab). *Roles*: Supervise and assist in research proposal writing, presentations and data analysis.

- Invited talk: ASA-CSSA-SSSA
  - Webinar classroom series: Harnessing Nano-Enabled Ag Technology for Soil and Crop Enhancement (CCU approved)
  - Link: https://tinyurl.com/sssawebinarseries

- Teaching and mentoring at the University of Florida, USA:

- Fall 2022 Teaching Assistant (SWS6134- Soil Quality, 3 Credits)- Roles: Guest lecture (Soil Health assessment) Grading assignments, contact point for students, providing feedbacks on student project work and presentation.
- Spring 2022 Teaching assistant (AGG4502/6503- Nanotechnology in agriculture, food and environment, 3 credits)- *Roles*: Guest lectures (Nanotechnology in Agriculture, current scenario and future direction, Carbon nanoparticles as soil amendment for sandy soils), grading student assignments.
- Student and visiting scholars mentoring: Inam Irshad, Muhammad Nadeem, Farid Ghulam, Amna Zulfiqar, Wiqar Ahmad. *Roles*: Lab protocol instructions, revise experimental proposals, assistance in setting up experiments, data collection and analysis.

- Teaching at Shree Janapriya Secondary School Technical Institute, Nepal (1y, 3mo, Student level: I.Sc. Agriculture)- Instruction. Courses: Farm management and machinery, Vegetable gardening, Mushroom farming. *Roles*: Take lectures, conduct exams, grade exams.

EXTENSION PUBLICATIONS AND INVOLVEMENTS

- Ghimire, O. P., Sullivan, T., Nepal, J., Joshi, P., & Dash, A. (2024) Communicating Your Story: Value of Diversifying Science Communications in Research. *CSA News*. https://doi.org/10.1002/csan.21439
- Nepal, J., Netto-Ferreira, J. B., Ghimire, D., Ghimire, O. P., & Joshi, P. (2024) From Chaos to Clarity. *CSA News*. https://doi.org/10.1002/csan.21422
- Nepal, J., Singh, L., & Bezerra de Oliveira, J. Mastering Meta-Analysis. (2024) *CSA News*. https://doi.org/10.1002/csan.21396
- Ghimire, O. P., Nepal, J., Poudel, P., & Powar, S. (2024). Unlocking the secrets of soil: Exploring the microbiome and its applications—Part 1, 2. *CSA News*, *69*(4), 12-18. https://doi.org/10.1002/csan.21268
- Ghimire, O. P., Lazo, A., Parajuli, B., & Nepal, J. (2024). Fostering Microbial Activity and Diversity in Agricultural Systems. *CSA News*, *69*(6), 43-47. https://doi.org/10.1002/csan.21313

- Nepal, J., Ghimire, O., & Lazo, A. Capitalizing on the Resources Offered by the Societies: A Pathway to Graduate Student Success. (2024) *CSA News*. https://doi.org/10.1002/csan.21339
- Nepal, J., Bhattarai, D., Bogati, S., Morales-Ona, A. G., & Tancredi, M. T. (2023). Support the Graduate Student Travel Scholarship: Your Contribution Will Help Empower the Next Generation of Scientists. *CSA News*, *68*(6), 39-41. https://doi.org/10.1002/csan.21047
- Tancredi, M. T., Nepal, J., Ganiger, M., Ghimire, O. P., Sullivan, T., de Almeida, T. F., ... & Sciarresi, C. (2023). The Agronomy, Crop, Soils Graduate Student Committee Works for You!. In *ASA, CSSA, SSSA International Annual Meeting*. ASA-CSSA-SSSA. https://scisoc.confex.com/scisoc/2023am/meetingapp.cgi/Paper/152568
- Nepal, J., Pradhan, G. P., & Sainju, U. (2023, October). Scientists and Students of Nepali Origin-from Nepal to the World. In *ASA, CSSA, SSSA International Annual Meeting*. ASA-CSSA-SSSA. https://scisoc.confex.com/scisoc/2023am/meetingapp.cgi/Paper/152988
- Citrus without borders: Interaction with researchers and farmers in Colombia with University of Florida. May, 2023. Magdalena University. Colombia.

EMPLOYMENT AND WORK EXPERIENCE

- Post-doctoral associate | Cornell University | Jan, 2024-present.
- Graduate Research Assistant | University of Florida | Jan, 2020-Dec 2023)
- Teaching Assistant | SWS6134 | AGG6503 | University of Florida. | (Fall / Spring 2022)
- Project team member and student researcher, SATREPS Project in Burkina Faso. | (2018-19)
- International Graduate Research and Teaching Assistant, The University of Tokyo. | (2017-19)
- Agriculture Instructor | Shree Janapriya Secondary School Technical Institute, Nepal. | (2016-17)
- Agricultural Trainer in vegetable production | Nepal Agriculture Research Council (NARC). | 2015
- Lab Assistant (Intern), Agriculture Training Center (ATC), Lalitpur, Nepal. | 2015.

LEADERSHIP AND VOLUNTARY ROLES

Agronomy-Crop-Soil Science Society (ASA-CSSA-SSSA) Graduate Student Committee. (2023-24)
(Subcommittees: Webinar subcommittee, Travel grant subcommittee)

- Work to plan, organize and facilitate graduate student-related activities through society.
- Develop graduate student-specific programs for the annual meeting of the society.
- Communicate graduate students' concerns, proposals, and interests to the respective society's chairs.

Editor-in-Social media Journal of Crop, Forage & Turfgrass Management (CFTM) (2023-2024)

- Publicize the published articles in the journal through social media platforms.
- Reach out to authors to collect content and help produce video abstracts or relevant content.
- Provide inputs to the editorial board to promote articles and plan for special issues.

Reviewer of scientific journals. (2022-Present)

- Journal of cleaner production, Plant and Soil, Frontier in Environmental Sciences, Journal of Soil Science and Plant Nutrition

Session organizer, moderator and judge for oral and Poster competitions, ASA-CSSA-SSSA annual meetings. (Nov. 2021)

- Judge the undergraduate and SASES students' oral and posters and point/rank them.
- Special Session organizer: —Nano-Enabled Agriculture: Prospects and Challenges across Crop and Soil Sciences, St. Louis MO, 2023.

Graduate Student Representative, Soil, Water and Ecosystem Sciences Dept. at IRREC. (2021-2023)

- Connect the SWES department's graduate student activities at RECs and main campus.
- Organize online meetings to discuss the agenda for the departmental meeting.

Gator Citrus Club, University of Florida, Committee Member. (2022-2023)

- Organize monthly Zoom meetings, co-ordinate with REC members and advisors.
- Organize annual citrus sale event (3days), collect citrus, advertise and conduct sale.
- Annual international field trip (Colombia and Costa Rica, 2023), establish collaboration with UF and foreign universities working on citrus and horticultural crops.

Social media content manager, Nepalese Student Association at UF in Gainesville. (2020-2023)

- Create digital content, and coordinate online meetings, training, and social activities.

Blog editor and digital content manager, Okada laboratory | University of Tokyo. (2017-2019)

- Create, edit, and upload articles, interviews, research photos, and videos to the laboratory blog.

Founder member, Youth for Conservation and Sustainable Agriculture (YCSA) (2012-2014)

- Organize community and campus wise events to promote sustainable agricultural practices.
- Create digital content and promote events through blogs and social media.

ACADEMIC REFEREES

1. Matthew Ryan (Post doctorate research advisor)
mrr232@cornell.edu, (607) 255-4964
Associate Professor, Cornell University.
School of Integrative Plant Science (Soil and Crop Sciences Section)
1113 Bradfield Hall, Ithaca, NY 14853

2. Dr. Zhenli He (Ph.D. advisor)
zhe@ufl.edu, +1-772-971-5854
Professor, University of Florida
Indian River Research and Education Center
Soil and Water Laboratory

3. Dr. Gabriel Maltais-Landry (Ph.D. co-advisor)
maltaislandryg@ufl.edu, +1-352-665-9349
Assistant Professor, University of Florida
Sustainable Nutrient Managements systems laboratory

4. Dr. Kensuke Okada (MS advisor)
akokada@mail.ecc.u-tokyo.ac.jp, +81-904-815-6905
Professor, University of Tokyo
Laboratory of Int'l Agricultural Developmental Sciences

5. Dr. K.P. Singh (BS Thesis advisor)
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