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EDUCATION

- Ph.D., Horticulture**, Michigan State University 2015 – 2018
• Dissertation: spectral manipulation improves growth and quality attributes of leafy greens grown indoors
- Ph.D., Multidisciplinary Science**, Rensselaer Polytechnic Institute (transferred) 2014 – 2015
- M.S., Horticulture**, Michigan State University 2012 – 2014
• Thesis: investigating use of blue, red, and far-red light from light-emitting diodes to regulate flowering of photoperiodic ornamental crops
- B.E., Agricultural Engineering • B.A., English**, China Agricultural University 2008 – 2012
• Thesis: the effects of light quality on growth and development of cucumber seedlings

PROFESSIONAL EXPERIENCE

- Assistant Professor**, University of Delaware, Newark, DE 2020 – present
- Ph.D. Research Assistant • Lab Manager**, Michigan State University, East Lansing, MI 2015 – 2019
- Ph.D. Research Assistant**, Rensselaer Polytechnic Institute, Troy, NY 2014 – 2015
- M.S. Research Assistant**, Michigan State University, East Lansing, MI 2012 – 2014
- English Teacher**, Beijing New Oriental & Technology Group Inc., Beijing, China 2011 – 2012

SCHOLARSHIP

Refereed Journal Publications

- **Meng, Q.** and E.S. Runkle. 2020. Growth responses of red-leaf lettuce to temporal spectral changes. [Front. Plant Sci. 11:571788](#).
- Kelly, N., D. Choe, **Q. Meng**, and E.S. Runkle. 2020. Promotion of lettuce growth under an increasing daily light integral depends on the combination of the photosynthetic photon flux density and photoperiod. [Sci. Hort. 272:109565](#).
- Lopez, R.G., **Q. Meng**, and E.S. Runkle. 2020. Blue radiation signals and saturates photoperiodic flowering of several long-day plants at crop-specific photon flux densities. [Sci. Hort. 271:109470](#).
- **Meng, Q.**, J. Boldt, and E.S. Runkle. 2020. Blue radiation interacts with green radiation to influence growth and predominantly controls quality attributes of lettuce. [J. Amer. Soc. Hort. Sci. 145:75–87](#).
- **Meng, Q.** and E.S. Runkle. 2019. Far-red radiation interacts with relative and absolute blue and red photon flux densities to regulate growth, morphology, and pigmentation of lettuce and basil seedlings. [Sci. Hort. 255:269–280](#).
- **Meng, Q.**, N. Kelly, and E.S. Runkle. 2019. Substituting green or far-red radiation for blue radiation induces shade avoidance and promotes growth in lettuce and kale. [Environ. Exp. Bot. 162:383–391](#).
- **Meng, Q.** and E.S. Runkle. 2019. Regulation of flowering by green light depends on its photon flux density and involves cryptochrome. [Physiol. Plant. 166:762–771](#).
- Owen, W.G., **Q. Meng**, and R.G. Lopez. 2018. Promotion of flowering from far-red radiation depends on the photosynthetic daily light integral. [HortScience 53\(4\):465–471](#).
- Song, J., **Q. Meng**, W. Du, and D. He. 2017. Effects of light quality on growth and development of cucumber seedlings in controlled environment. [Int. J. Agric. Biol. Eng. 10\(3\):312–318](#).

- **Meng, Q.** and E.S. Runkle. 2017. Moderate-intensity blue radiation can regulate flowering, but not extension growth, of several photoperiodic ornamental crops. [Environ. Exp. Bot. 134C:12–20](#).
- **Meng, Q.** and E.S. Runkle. 2015. Low-intensity blue light in night-interruption lighting does not influence flowering of herbaceous ornamentals. [Sci. Hort. 186:230–238](#).

Book Chapters

- **Meng, Q.** and E.S. Runkle. 2016. Control of flowering using night-interruption and day-extension LED lighting, p. 191–201. In: T. Kozai et al. (eds.). [LED Lighting for Urban Agriculture](#). Springer Singapore, Singapore.
- Mitchell, C.A., M.P. Dzakovich, C. Gomez, R. Lopez, J.F. Burr, R. Hernández, C. Kubota, C.J. Currey, **Q. Meng**, E.S. Runkle, C.M. Bourget, R.C. Morrow, and A.J. Both. 2015. Light-emitting diodes in horticulture, p. 1–88. In: J. Janick (ed.). [Horticultural Reviews vol. 43](#). John Wiley & Sons, Hoboken, NJ.

Trade Articles

- **Meng, Q.** and E.S. Runkle. 2021. Far-red and PPF: A tale of two lettuce cultivars. [Produce Grower](#).
- **Meng, Q.** and E.S. Runkle. 2021. Differentiating broad spectra. [Produce Grower](#).
- **Meng, Q.** and E.S. Runkle. 2021. LEDs on lettuce: white light versus red + blue light. [Produce Grower](#).
- **Meng, Q.** and E.S. Runkle. 2019. Leafy greens: green and blue LED lighting. [Produce Grower](#).
- **Meng, Q.** and E.S. Runkle. 2019. Leafy greens: green and far-red LED lighting. [Produce Grower](#).
- **Meng, Q.** and E.S. Runkle. 2019. How green light affects floriculture crops. [Greenhouse Grower](#).
- **Meng, Q.** 2017. Green light is more useful to plants than you might think. [Urban Ag News](#).
- **Meng, Q.** and E.S. Runkle. 2017. Far red is the new red. [Inside Grower](#).
- **Meng, Q.** and E.S. Runkle. 2016. Choosing the right LEDs to regulate flowering in greenhouses. [Michigan State University Extension](#).
- **Meng, Q.** and E.S. Runkle. 2015. Can white LEDs control flowering? [Greenhouse Management](#).
- **Meng, Q.** and E.S. Runkle. 2014. Evaluating different colors of LEDs to control flowering. [Greenhouse Product News](#).
- **Meng, Q.** and E.S. Runkle. 2014. Control flowering with LEDs. [GrowerTalks](#).

SELECTED HONORS AND AWARDS

American Society for Horticultural Science

- Outstanding Vegetable Publication Award (most outstanding paper on vegetable crops published in 2020). Denver, CO, 2021.
- 1st place, Controlled Environment Working Group Grad Student Oral Competition. Washington, D.C., 2018; Waikoloa, HI, 2017; New Orleans, LA, 2015.
- 1st place, Floriculture Working Group Grad Student Oral Competition. Waikoloa, HI, 2017.
- 3rd place, Controlled Environment Working Group Grad Student Oral Competition. Atlanta, GA, 2016.

Michigan State University, East Lansing, MI

- The Bukovac Outstanding Grad Student Award in the Department of Horticulture. 2018.
- 1st place, Oral Competition in the Plant Science Grad Student Research Symposium. 2014; 2016–18.
- Best Overall Oral Presentation in the 9th Grad Academic Conference. 2017.
- The John L. Arend Excellence in Grad Student Research Award. 2014; 2017.

International Society for Horticultural Science, East Lansing, MI

- 2nd place, Poster Competition in the 8th International Symposium on Light in Horticulture. 2016.

Committee on Controlled Environment Technology & Use (NCERA-101)

- 1st place, Grad Student Poster Competition. Fairbanks, AK, 2014.