

Kacie K.H.Y. Ho
College of Tropical Agriculture and Human Resources
Department of Human Nutrition, Food and Animal Sciences
FTE Distribution: 60% I; 40% R; 0% E

Education

<u>Degree</u>	<u>University</u>	<u>Major</u>
PhD	Purdue University	Food Science- <i>Specialization in Processing and Technology</i>
Bachelors	University of Hawaii at Manoa	Food Science

Professional Appointments

<u>Title</u>	<u>Employer</u>	<u>Dates Employed</u>
Assistant Professor	University of Hawaii	2018-Present
Postdoctoral Research Scholar	North Carolina State University.	2017-2018
Postdoctoral Teaching Scholar	Wageningen University	2017-2017
Visiting Research Scientist	Wageningen University.	2015-2016

Courses Taught

Course Number and Title (credits)

FSHN 381 Experimental Foods (3)
FSHN 381L Experimental Foods Laboratory (1)
FSHN 445 Food Quality Control (3)
FSHN 494 Food Science Capstone (3)
FSHN 607 Advanced Food Science I (3)

Publications (reverse chronological order)

Book Chapters

Schröder, Anja, Corstens, Meinou N., Ho, Kacie K.H.Y., Schroën, Karin, & Berton-Carabin, Claire C. (2018). Pickering Emulsions. *Emulsion-based Systems for Delivery of Food Active Compounds: Formation, Application, Health and Safety*, 29-67.

Refereed Journal Publications

Li, Guangle, Cao, Zhenle, Ho, Kacie K.H.Y., Zuo, Yi Y. (2022). Quantitative determination of the hydrophobicity of nanoparticles. *Analytical Chemistry*, 94(4), 2078-2086.

<https://doi.org/10.1021/acs.analchem.1c04172>

Ho, Kacie K.H.Y. and Redan, Benjamin W. (2021). Impact of thermal processing on the nutrients, phytochemicals, and metal contaminants in edible algae. *Critical Reviews in Food Science and Nutrition*, 62(2), 508-526.

<https://doi.org/10.1080/10408398.2020.1821598>

- Li, Guangle, Ho, Kacie K.H.Y., Zuo, Yi Y. (2021). Relative dye adsorption method for determining the hydrophobicity of nanoparticles. *The Journal of Physical Chemistry C*, 126(1), 832-837. <https://doi.org/10.1021/acs.jpcc.1c09610>
- Laurora, Alice, Bingham, J.P., Poojary, Maheasha M., Wall, Marisa M., Ho, Kacie K.H.Y. (2021). Carotenoid composition and bioaccessibility of papaya cultivars from Hawaii. *Journal of Food Composition and Analysis*, 101, 103984. <https://doi.org/10.1016/j.jfca.2021.103984>
- Jun, Shawn, Chun, Cherisse, Ho, Kacie, Li, Yong. (2021). Design and evaluation of a microfluidic insulator-based dielectrophoresis (DEP) retention device to separate bacteria from tap water. *Water*, 13(12), 1678. <https://doi.org/10.3390/w13121678>
- Ho, Kacie K.H.Y., Redan, Benjamin W. (2020). Impact of thermal processing on the nutrients, phytochemicals, and metal contaminants in edible algae. *Critical Reviews in Food Science and Nutrition*, 1-19. <https://doi.org/10.1080/10408398.2020.1821598>
- Ho, Kacie K.H.Y., Ferruzzi, Mario G., Wightman, JoLynne. (2020). Potential health benefits of (poly)phenols derived from fruit and 100% fruit juice. *Nutrition Reviews*, 78(2), 145-174. <https://doi.org/10.1093/nutrit/nuz041>
- Li, Min, Ho, Kacie K.H.Y., Hayes, Micaela, & Ferruzzi, Mario G. (2019) The roles of food processing in translation of dietary guidance for whole grains, fruits, and vegetables. *Annual Review of Food Science and Technology*, 10, 569-596. <https://doi.org/10.1146/annurev-food-032818-121330>
- Ho, Kacie K.H.Y., Haufe, Thomas C., Ferruzzi, Mario G., Neilson, Andrew P. (2018). Production and polyphenolic composition of tea. *Nutrition Today*, 53(6), 268-278. <https://doi.org/10.1097/NT.0000000000000304>
- Haufe, Thomas C., Ho, Kacie K.H.Y., Ferruzzi, Mario G., & Neilson, Andrew P. (2018). Potential Health Effects of Tea. *Nutrition Today*, 53(5), 213-228. <https://doi.org/10.1097/NT.0000000000000294>
- Ho, Kacie K.H.Y., Schroën, Karin, San Martín-Gonzalez, M. Fernanda, Berton-Carabin, Claire C. (2018). Synergistic and antagonistic effects of plant and dairy protein blends on the physicochemical stability of lycopene-loaded emulsions. *Food Hydrocolloids*. <https://doi.org/10.1016/j.foodhyd.2018.02.033>
- Ho, Kacie K.H.Y., Schroën, Karin, San Martín-Gonzalez, M. Fernanda, Berton-Carabin, Claire C. (2016). Physicochemical stability of lycopene-loaded emulsions stabilized by plant or dairy proteins. *Food Structure*, 12, 34-42. <http://dx.doi.org/10.1016/j.foostr.2016.12.001>
- Ho, Kacie K.H.Y., Ferruzzi, Mario G., Liceaga, Andrea M., San Martin-Gonzalez, M. Fernanda.

(2015). Microwave-assisted extraction of lycopene in tomato peels: effect of extraction conditions on all-*trans* and *cis*-isomer yields. *LWT-Food Science and Technology*, 62(1), 160-168. <http://dx.doi.org/10.1016/j.lwt.2014.12.061>

Leadership Roles (Committees, Boards, Advisory, etc.)

Professional Roles

Secretary. 2021-2022. Multistate Research Project Nutrient Bioavailability-Phytochemicals and Beyond Cohort.

Treasurer. 2019-Present. Institute of Food Technologists-Hawaii Section.

Secretary-Treasurer. 2018-2021. American Oil Chemists' Society Health & Nutrition Division.

Newsletter Editor. 2018-2021. American Oil Chemists' Society Health & Nutrition Division.

Lifetime Member, 2013-Present. Phi Tau Sigma (Food Science Honorary)

Review Board Member. 2013-2016. Institute of Food Technologists Higher Education Review

University/College/Departmental Roles

Committee Member. 2021-Present. CTAHR Strategic Planning Working Group.

Chair. 2021-Present. HNFAS Strategic Planning Committee.

Instructional Committee Member. 2020-Present. CTAHR Faculty Senate

Committee Member. 2019-Present. HNFAS Space Committee.

Committee Member. 2019-Present. HNFAS Research and Extension Committee.

Committee Member. 2019-Present. CTAHR Research Day Committee.

Committee Member. 2019-Present. Board of Regents Willard Wilson Award Committee.

Committee Member. 2019. CTAHR Student Research Symposium Committee.

Graduate Students

<u>Category</u> <u>(Career)</u>	<u>Current Number of Students</u>	<u>Number Graduated</u>
Chair of Master's Committees	2	3
Chair of PhD Committees	0	0
Member of Master's Committees	2	4
Member of PhD Committees	1	1

Grant Support

Title of Grant: Empowering Underrepresented Graduate Students with Advanced Research Training in Food Science.

Source of Grant: USDA-NIFA

Total Dollar Value (Your share of the grant value): \$246,000 (\$246,000)

Dates of Grant: 10/22-09/26

Role (PI, CoPI): PI

Title of Grant: Leveraging tropical commodities for a high quality and nutritious food supply

Source of Grant: USDA-ARS

Total Dollar Value (Your share of the grant value): \$35,000 for Year 1 (renewed annually)

Dates of Grant: 10/23-09/27

Role (PI, CoPI): PI

Title of Grant: Enhanced bacterial viability of freeze-dried probiotics using supercooling pretreatment

Source of Grant: USDA SBIR Phase I

Total Dollar Value (Your share of the grant value): \$25,000 (\$25,000)

Dates of Grant: 10/21-02/22

Role (PI, CoPI): PI

Title of Grant: Electric and magnetic field-based supercooling technology to ensure the freshness in the food supply chain

Source of Grant: USDA-NIFA-AFRI

Total Dollar Value (Your share of the grant value): \$500,000

Dates of Grant: 01/21-12/23

Role (PI, CoPI): CoPI

Title of Grant: Enhancing local pork marketing for Oahu hog producers

Source of Grant: Hawaii Department of Agriculture

Total Dollar Value (Your share of the grant value): \$165,935 (\$165,935)

Dates of Grant: 11/20-08/21

Role (PI, CoPI): PI

Title of Grant: Nanobubble technology applications in aquaculture, aquaponics, hydroponics, environment, food and food safety

Source of Grant: CTAHR Team Science

Total Dollar Value (Your share of the grant value): \$80,000

Dates of Grant: 10/19-09/21

Role (PI, CoPI): CoPI

Title of Grant: Optimizing local food nutrient density through agriculture and food processing practices and enhancing public awareness on nutrient value in local food

Source of Grant: CTAHR Team Science

Total Dollar Value (Your share of the grant value): \$36,618 (\$19,627)

Dates of Grant: 10/19-09/21

Role (PI, CoPI): (Multi) PI

Title of Grant: Postharvest technology and nutrition studies for Hawaii specialty crops and fruits

Source of Grant: USDA-ARS

Total Dollar Value (Your share of the grant value): \$131,389 (\$131,389)

Dates of Grant: 10/18-09/23

Role (PI, CoPI): PI

Presentations at Conferences

Title: Arsenic and nutrient composition across different edible seaweeds from Hawaii (Poster)

Authors (put an asterisk on the presenter): Kim, Samuel*, Conklin, Sean, Redan, Benjamin W., Ho, Kacie K.H.Y

Name of Conference: American Society for Nutrition's 2022 Live Online Virtual Meeting
Location: Online <https://doi.org/10.1093/cdn/nzac077.020>
Date of Presentation: June 14-16, 2022

Title: Nutrient content and carotenoid bioaccessibility of underutilized taro varieties from Hawaii (Poster)

Authors (put an asterisk on the presenter): Senga, Kento*, Bingham, Jon-Paul, Wall, Marisa M. Ho, Kacie K.H.Y.

Name of Conference: 2022 American Oil Chemists' Society Annual Meeting.

Location: Online

Date of Presentation: May 1-4, 2022

Title: Development of soy-isoflavone Pickering-particles for oil-in-water (O/W) emulsion stability (Poster)

Authors (put an asterisk on the presenter): Pereira, Garinn M.* & Ho, Kacie K.H.Y.

Name of Conference: 2021 Institute of Food Technologists Annual Meeting

Location: Online

Date of Presentation: July 19-21, 2021

Title: Stability of Soy Protein-isoflavone Particles and Pickering Emulsions (Oral)

Authors (put an asterisk on the presenter): Pereira, Garinn M.* & Ho, Kacie K.H.Y.

Name of Conference: 2021 American Oil Chemists' Society Annual Meeting

Location: Online <https://doi.org/10.21748/am21.408>

Date of Presentation: May 7, 2021

Title: Nutritional and phytochemical analysis of different colored taro varieties in Hawaii

Authors (put an asterisk on the presenter): Senga, Kento* & Ho, Kacie K.H.Y.

Name of Conference: 2021 American Oil Chemists' Society Annual Meeting

Location: Online <https://doi.org/10.21748/am21.537>

Date of Presentation: May 3-14, 2021

Title: Composition and carotenoid bioaccessibility of papaya (*C. papaya*) cultivars from Hawaii (Poster)

Authors (put an asterisk on the presenter): Laurora, Alice, Bingham, J.P., Poojary, Mahesha, M., Ho, Kacie K.H.Y.*

Name of Conference: 2021 Leading Emerging and Diverse Scientists Summit

Location: Online

Date of Presentation: February 18, 2021

Title: Varietal differences in carotenoid composition and their bioaccessibility from papaya (*C. papaya*) cultivars in Hawaii (Oral)

Authors (put an asterisk on the presenter): Laurora, Alice*, Bingham, J.P., Poojary, Mahesha, M., Ho, Kacie K.H.Y.

Name of Conference: 2020 American Oil Chemists's Society Annual Meeting

Location: Online

Date of Presentation: April 26-29, 2020

Other Presentations

Title: The effect of pre-harvest treatment on phenolic content in mamaki (*Pipturus albidus*) leaves

Authors (put an asterisk on the presenter): Kennedy, Taylor-Jane*, Vital de Sousa Jr, Wanderley, Ahmad, Amjad, Ho, Kacie K.H.Y.

Type of presentation: Poster for the 2022 Summer Undergraduate Research Experience Symposium

Location: University of Hawai'i at Mānoa, Honolulu, HI

Date of presentation: July 29, 2022

Title: Assessing written communication skills across food science courses with a common rubric.

Authors (put an asterisk on the presenter): Ho, Kacie K.H.Y.*, Jun, Soojin, Li, Yong.

Type of presentation: Poster for Assessment for Curricular Improvement Poster Exhibit and the University of Hawai'i at Mānoa

Location: Online <https://scholarspace.manoa.hawaii.edu/items/47f11ce4-1b2a-464f-adad-87bc4fd9ac65>

Date of Presentation: April 9, 2021

Title: Taro: Field to Plate A Virtual Field Day

Authors (put an asterisk on the presenter): Uyeda, Jensen*, Ho, Kacie K.H.Y.*, Esquivel Monica*

Type of Presentation: Oral Presentation/Digital Workshop

Location: Online (<https://youtu.be/9Rm1vsYpgx0>)

Date of Presentation: September 24, 2020

Title: Food Science from Hainan to Hawaii

Authors (put an asterisk on the presenter): Ho, Kacie K.H.Y.*

Type of Presentation: Oral Presentation for the Hawaii Institute of Food Technologists

Location: Honolulu, HI

Date of Presentation: November 15, 2018