Tuesday, April 18, 2023	
4.00 - 6.00 pm	**Arrival and Registration**
6.00 - 9.00 pm	**Meet and Greet/Registration (Moss Patio, UC Davis Alumni Center)**
Wednesday, April 19, 2023	
7.00 - 8.00 am	**Breakfast/Registration (UC Davis Conference Center)**
8:00 - 8:10 am	**Welcome Session:** Prof. Fadi Fathallah, Chair, Department of Biological and Agricultural Engineering, University of California, Davis Prof. Gail Taylor, Chair, Deaprtment of Plant Sceinces, University of California, Davis
8:10 - 8:20 am	**Steven J. Thomson, National Program Leader, USDA (Remote Session)**
8:20 - 10:00 am	**NCERA-101 Business Meeting 100"** **Session Chair:** Marc Theroux
10:00 - 10:30 am	**Coffee Break & Sponsor Display**
10:30 - 12:00 pm	**Student Lightning Talks 90"** **Session Chair:** Ricardo Hernandez, North Carolina State University
10:30 - 10:35 am	Effects of Far-Red Light on Indoor Strawberry Production, Jonathan Ries, Arizona State University
10:35 - 10:40 am	Carbon Dioxide Enrichment in Controlled Environments for Enhanced Production, Samantha Rosado, Colorado State University
10:40 - 10:45 am	The Effect of Complementary Far-Red Radiation with a Background of White Light on Cannabis sativa, Bret Timmons, Cornell University
10:45 - 10:50 am	Optimized Cultivation and Post-Harvest Techniques to Standardize Cannabis Production Systems, Philip Wiredu Addo, McGill University
10:50 - 10:55 am	Quantifying the Influence of Root-Zone Temperature on Rooting and Growth of Foliage Plant Cuttings, Hyeonjeong Kang, Michigan State University
10:55 - 11:00 am	Impact of Elevated CO_2 and Two Daily Light Integrals on Strawberry Stock Plant and Strawberry Tip Production, Samson Humphrey, NCSU
11:00 - 11:05 am	Optimize Agrobacterium-Mediate Transformation Using Half-Seed Method Via Various Light Intensities of Led in Soybean (Glycine Max), Xiaonan Shi, NCSU
11:05 - 11:10 am	Grafting Arrests the Development of Flowers During Post-Grafting Growth of Triploid Watermelon, Jason Hollick, Ohio State University
11:10 - 11:15 am	Environmental Control of Onset and Release of Dormancy to Enhance Vegetative Growth and Runnering in 'Albion' and 'Fronteras' Strawberry Cultivars, Pooja Tripathi, Ohio State University
11:15 - 11:20 am	Reduced Finishing Light Can Limit Tipburn Incidence and Severity of Lettuce with a Yield Penalty, John Ertle, Ohio State University

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11:20 - 11:25 am	Far-red Light, Photoperiod, and Temperature interactively regulate Lettuce Growth, Morphology, and Photosynthesis, SangJun Jeong, Texas A&M AgriLife Research
11:25 - 11:30 am	Improving Yield and Nutritional Quality of Watercress Grown in an Indoor Vertical Farm, Yufei Qian, University of California, Davis
11:30 - 11:35 am	Optimized Energy Requirement of Nursery Greenhouses Under Mediterranean Climate, T M Abir Ahsan, University of California, Davis
11:35 - 11:40 am	Can Airflow Prevent Tip burn in Lettuce Grown in Vertical Farming System? Vertical vs Horizontal Airflow Comparison, Christopher Kaufmann, University of Arizona
12.00 - 1:00 pm	**Lunch Buffet (UC Davis Conference Center Lobby)**
1:00 - 2:45 pm	**Student Lightning Talks and Poster Presentations 45”** **Session Chair:** Murat Kacira, University of Arizona
1:00 - 1:05 pm	A Calcium-Mobilizing Biostimulant Mitigates Lettuce Tipburn in Greenhouse Hydroponic Production, Kishan Biradar, University of Delaware
1:05 - 1:10 pm	A Low-cost Hyperspectral Data Analysis Pipeline for Controlled Environment and Space Agriculture, Stephen Lantin, University of Florida
1:10 - 1:15 pm	Exploring the Landscape of Controlled Environment Agriculture Research: A Systematic Scoping Review of Current Trends and Topics, Ajwal Dsouza, University of Guelph
1:15 - 1:20 pm	Optimization and Scalability of Regenerative in situ Electrochemical Hypochlorination for Closed-Loop Hydroponics, Serge Lévesque, University of Guelph
1:20 - 1:25 pm	Electrolytic and Capacitive Relative Humidity Sensors: Which Should You Implement in Your Production System? Brendan Fatzinger, Utah State University
1:25 - 1:30 pm	Hydroponic Nutrient Solutions Designed Using Mass-balance Enable Continuous Recirculation Without Wasting Water or Fertilizer, Noah J. Langenfeld, Utah State University
1:30 - 1:35 pm	Nutrient Management of Cannabis in Closed Hydroponic Systems, Julie Hershkowitz, Utah State University
1:35 - 1:40 pm	Optimizing Temperature for Yield and Quality of Medical Cannabis, Mitchell Westmoreland, Utah State University
1:40 - 1:45 pm	Break
1:45 - 2:45 pm	**Poster Sessions**
2:45 - 3:30 pm	**Coffee Break & Sponsor Display**
3:30 - 5:15 pm	**Station Reports, Scientific and New Technology, 105”** **Session Chair:** Neil Mattson, Cornell University
3:30 - 3:45 pm	McGill University
3:45 - 4:00 pm	Purdue University
4:00 - 4:15 pm	Texas A & M University

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4:15 - 4:30 pm	University of Florida
4:30 - 4:45 pm	North Carolina State University-Coalition
4:45 - 5:00 pm	North Carolina State University-Phytotron
5:00 - 6:30 pm	**Break**
6:30 - 9:00 pm	**Gala Dinner with Keynote Speaker (UC Davis Good Life Garden)**
6:30 - 6:40 pm	Jason Bond, Associate Dean, College of Agricultural and Environmental Sciences
6:40 – 6:45 pm	Student Award for Lightening Talk, Ricardo Hernandez, North Carolina State University
6:45 - 7:30 pm	**Keynote Speaker:** Prof. Christian Nansen, Department of Entomology and Nematology, University of California, Davis **Title:** Cold Plasma, advanced lighting, Robotic Spraying and Optical Sensing in Innovative Studies of Greenhouse Crops

Thursday, April 20, 2023

7:00 - 8:00 am	**Breakfast**
8:00 - 9:45 am	**Station Reports, Scientific and New Technology 105”** **Session Chair:** Erik Runkle, Michigan State University
8:00 - 8:15 am	University of Delaware
8:15 - 8:30 am	Arizona State University
8:30 - 8:45 am	Utah State University
8:45 - 9:00 am	University of California, Davis
9:00 - 9:15 am	Rutgers University
9:15 - 9:30 am	Michigan State University
9:30 - 9:45 am	Cornell University
9:45 - 10:15 am	**Coffee Break & Sponsor Display**
10:15 am - 12:00 pm	**Station Reports, Scientific and New Technology 105”** **Session Chair:** Genhua Niu, TAMU
10:15 -10:30 am	University of California, Riverside
10:30 - 10:45 am	Ohio State University- Wooster Campus
10:45 - 11:00 am	Ohio State University- Columbus Campus
11:00 - 11:15 am	University of Arizona
11:15 -11:30 am	University of Minnesota
11:30 -11:50 am	University of Guelph
12:00 - 1:00 pm	**Lunch Buffet (UC Davis Conference Center Lobby)**
1:00 - 2:30 pm	**Station Reports, Scientific and New Technology 90”** **Session Chair :** Neil Yorio, Maui Greens
1:00 - 1:15 pm	Greenhouse Lighting and Systems Engineering Consortium (GLSAE)

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1:15 - 1:30 pm	Agriculture and Agri-Food Canada
1:30 -1:45 pm	NASA Ames Research Center
1:45 - 2:00 pm	Resource Innovation Institute
2:00 - 2:15 pm	Blue Marble Space Institute of Science
2:15 - 2:25 pm	Heliospectra
2:25 - 2:35 pm	Light4Food
2:40 -3.00 pm	**Coffee Break & Sponsor Display**
3:00 – 3:55 pm	**Station Reports, Scientific and New Technology 60”** **Session Chair :** Gioia Massa, NASA
3:00 - 3:10 pm	Li-Cor Environmental
3:10 - 3:20 pm	Apogee Instrument, Inc.
3:20 - 3:30 pm	Sierra Space
3:30 - 3:40 pm	Greenhouse Design LLC
3:40 - 3:50 pm	SyNRGE LLC
3:50 - 4:00 pm	Koidra
4:00 - 4:10 pm	**Coffee Break**
4:10 - 5:10 pm	**Station Reports, Scientific and New Technology 60”** **Session Chair :** David Bubenheim, NASA
4:10 - 4:20 pm	Fluence
4:20 - 4:30 pm	Percival Scientific, Inc.
4:30 - 4:40 pm	DRAMM
4:40 - 4:50 pm	Nature Sweet
4:50 - 5:00 pm	Valoya Inc
5:00 - 5:10 pm	Current Lighting
5:10 - 6:15 pm	**Break**
6:30 - 10:30 pm	**Winery Dinner (Great Bear Vineyards)** (Bus Leave from Hyatt place at 6:15 pm)

Friday, April 21, 2023

8:00 - 8:30 am	**Grab and Go Breakfast (Mondavi Center)**
8:30 - 10:00 am	**Core Greenhouse Facility and UC Davis Central Controlled Environment Facility**
10:15 am -12:30 pm	**California Agricultural Museum (Bus Leave by 10:15 am from Core Greenhouse Facility)-** First come, first served
10:00 am - 12:30 pm	**Connected Cannabis (Bus Leave by 10.0 am from Core Greenhouse Facility) -** First come, first served (maximum 25)
12:30 - 1:30 pm	**Lunch (Grab and Go) (Bowley Plant Science Building -** Near UC Davis Core Greenhouse Facility)

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