

# 2021 Industrial Hemp Conference

## Virtual Meeting—February 26, 2021

The University of Vermont Extension Northwest Crops and Soils Program and the Vermont Agency of Agriculture, Food & Markets invite you to join us for the [Third Annual Industrial Hemp Conference](#). The conference will be held virtually on Friday, February 26, 2021, 8:00 a.m. to 5:00 p.m.

The conference will include live presentations, on-demand prerecorded presentations, a virtual exhibitor hall, panels, and plenty of networking opportunities!

Registration provides you access to the conference platform a week before and two weeks following the conference. Enjoy presentations, resources, and the exhibitor hall at your leisure.

Speaker highlights include agronomist, **Bob Pearce** and economist, **Tyler Mark** from the University of Kentucky, **Whitney Cranshaw**, entomologist, from Colorado State University, **Gary Bergstrom**, plant pathologist, from Cornell University, and **Nick Stromberg** from Beacon Hemp in California.

Topic highlights include integrated pest management, agronomics, feminized seed production, harvest timing, drying and storage strategies, marketing, economics, product safety, farmer panels, and more.

**Please register by Noon, February 25, 2021.**

Cost is \$75 per registrant. Registration is online through the UVM's Non-Credit Registrar's Office, 802-656-8407—[Register Now](#).

Prior to the conference, you will receive an email with your username and password to log into the virtual conference platform.

- **Make sure and check out the Virtual Exhibitor Hall while online!**
- **Certified Crop Adviser CEUs are available for all live and on-demand presentations. Credit information will be noted by the presentation description on pages 2 and 4 of this brochure.**

*If you require an accommodation related to a disability, please contact UVM Student Accessibility Services at [access@uvm.edu](mailto:access@uvm.edu) or (802) 656-7753.*



**DISCLAIMER:** Changes may be made to this agenda.

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### CULTIVATING HEALTHY COMMUNITIES

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### KEYNOTE SPEAKER



Dr. John McPartland began his cannabinoid research in 1981—the last person issued a DEA Schedule I license to cultivate Cannabis before the Reagan War On Drugs. He's consulted for GW Pharmaceuticals since 1999, but primarily earns his keep as an osteopathic physician in Middlebury. John will share tales, trials, and tribulations of working with one of the most controversial crops in world. John's keynote topic is a 'Random walk through a (the) Cannabis field'.

# AGENDA

## 2021 Industrial Hemp Conference

Time	Track 1	Track 2	Track 3
8:00 am—8:45 am	Joining virtually and visiting Exhibitors		
8:45 am – 10:00 am	<b>Welcome and Plenary Session— John McPartland</b> - Random walk through a (the) <i>Cannabis</i> field <b>CEU PD 1.0 Credit</b>		
<b>Session 1</b> 10:15 am - 11:15 am	Gary Bergstrom and Jennifer Starr—Diseases affecting hemp in the Northeast <b>CEU IPM 1.0 Credit</b>	Tyler Mark—2021 Growing season and beyond <b>CEU PD 1.0 Credit</b>	Jeanine Davis—North Carolina hemp field research results <b>CEU CM 1.0 Credit</b>
11:15 am - 11:45 am	<b>Break, visiting Exhibitors, and Networking</b>		
<b>Session 2</b> 11:45 am - 12:45 pm	Chris Callahan and Gretchen Schimelpfenig—Best practices for drying and curing hemp <b>CEU PD 1.0 Credit</b>	Rose Wilson and Suzy Hodgson—Is hemp worth it? <b>CEU PD 1.0 Credit</b>	Bob Pearce—CBD & THC accumulation in floral hemp cultivars: Implications for compliance testing and harvest scheduling <b>CEU CM 1.0 Credit</b>
12:45 pm - 1:15 pm	<b>LUNCH, watch on-demand sessions, visit Exhibitors, and Networking</b>		
<b>Session 3</b> 1:15pm - 2:15 pm	Farmer Panel—presentations from Jahala Dudley of Fox Holler Farms in VT, Ben Edwards of Schoppee Farm in ME, and Becky Goetsch of Running Brook Farms in CT <b>CEU CM 1.0 Credit</b>	Growing and processing hemp in the Northeast: Differences and similarities among state hemp programs with speakers from Massachusetts, Maine and Vermont <b>CEU PD 1.0 Credit</b>	Whitney Cranshaw— Insects and mites of North American hemp and their management: Current status <b>CEU IPM 1.0 Credit</b>
<b>Session 4</b> 2:30 pm - 3:30 pm	Omar Oyarzabal and Timothy Murray—Food safety consideration during the manufacturing of hemp products <b>CEU PD 1.0 Credit</b>	Riley Gordon and Harold Stanislawski—Building an industrial hemp industry in Minnesota <b>CEU PD 1.0 Credit</b>	David Suchoff—Cannabis agronomics: Establishing best practices for floral hemp in the Southeast <b>CEU CM 1.0 Credit</b>
3:30 pm - 4:00 pm	<b>Break, visiting Exhibitors, and Networking</b>		
<b>Session 5</b> 4:00 pm - 5:00 pm	Nick Stromberg—Breeding and production of feminized, day-neutral hemp seed <b>CEU CM 1.0 Credit</b>	Processing Panel—presentations from Dan Dolgin of JD Farms and Eaton Hemp and Chas Gill of Merrymeeting Bay Hemp Company <b>CEU PD 1.0 Credit</b>	Heather Darby—UVM Research Updates <b>CEU SWM 1.0 Credit</b>

**8:45 am – 10:00 am—Welcome and Plenary Session— *Random walk through a (the) Cannabis field***, Dr. John McPartland, Osteopathic Physician in Middlebury, VT.

**Session 1—10:15 am - 11:15 am**

***Note: T1-Track 1; T2-Track 2; and T3-Track 3***

**T1, Diseases affecting hemp in the Northeast**—Dr. Gary Bergstrom and Jennifer Starr from Cornell University will review the identification and assessment of diseases found on hemp in the Northeast over the past four years including diseases affecting roots, stems, foliage and floral tissues of hemp. Preliminary information on the risk for mycotoxin contamination will also be discussed.

**T2, 2021 Growing season and beyond**—Tyler Mark from the University of Kentucky. The hemp industry's marketplace, supply chain, and regulations are continuously evolving. We will explore their impact on the growing hemp industry and your business.

**T3, North Carolina hemp field research results**—Dr. Jeanine Davis, North Carolina State University. We've learned a lot in four years! Jeanine will share results from their CBD, grain, and fiber variety trials and studies on spacing, mulches, and planting/harvest timing of CBD hemp.

**11:15 am—11:45 am—Break, visit Exhibitors, Networking**

**Session 2—11:45 am - 12:45 pm**

**T1, Best practices for drying and curing hemp**—Chris Callahan, UVM, and Gretchen Schimelpfenig, Resource Innovation Institute. Quality hemp products depend on good cultivation practices, but also careful post-harvest handling. We will discuss the processes of drying and curing, environmental conditions important to hemp quality, and best practices for operating drying and curing systems.

**T2, Is hemp worth it?** - In this session, Rose Wilson, Consultant and Suzy Hodgson, UVM, will explore the unique challenges of hemp as an enterprise. All crops have risk, however, hemp throws new curveballs. Regulatory, production, and marketing risks unique to this crop will be surfaced. The objective is to help both experienced and beginner farmers, who are new to hemp, gain insight to conduct their own return on investment before adding hemp to their operations.

**T3, CBD & THC accumulation in floral hemp cultivars: Implications for compliance testing and harvest scheduling** – Dr. Bob Pearce of the University of Kentucky. Four hemp cultivars typically grown for floral components were sampled on weekly basis beginning at floral initiation to track the accumulation of total THC and CBD over time. Guidance will be provided to help growers make decisions about compliance testing and harvest timing.

**12:45 pm—1:15 pm—Lunch, visiting Exhibits, Networking**

**Session 3—1:15 pm - 2:15 pm**

**T1, Farmer Panel**—Presentations from Jahala Dudley of Fox Holler Farms in Colchester, VT; Ben Edwards of Schoppee Farm in Maine who will share his experiences with their seed to shelf products; and Becky Goetsch of Running Brook Farms in Connecticut, where they have a nursery with landscaping, specialty plants, and more.

**T2, Growing and processing hemp in the Northeast: Differences and similarities among state hemp programs.** Massachusetts (Sarah Grubin), Maine (Mary Yurlina) and Vermont (Stephanie Smith) state hemp program representatives will share similarities and explain differences between their respective hemp programs. Awareness of regulations and process will help the hemp community make informed decisions and remain compliant as hemp markets mature and national regulation becomes more clear.

**T3, Insects and mites of North American hemp and their management: Current status**—Whitney Cranshaw, Colorado State University. A review of what kinds of insects/mites are found in hemp, what they are doing in the crop, and some ideas on how we may manage those that are potentially damaging to the crop. This will review the present understanding of what insects occur in North America, emphasizing those that may be most important in the northeastern United States.

**Session 4—2:30 pm –3:30 pm**

**T1, Food safety consideration during the manufacturing of hemp products**—Dr. Omar Oyarzabal, UVM, and Timothy Murray of Gaia Herbs in North Carolina. This presentation will focus on the basic food safety aspects that companies consider when manufacturing edible products from hemp leaves, flowers and seeds. We will review the concepts of good manufacturing practices and discuss some of the requirements, or expectations, that food manufacturing companies have when purchasing hemp product for further processing.

**T2, Building an industrial hemp Industry in Minnesota**—Riley Gordon and Harold Stanislawski of the Agricultural Utilization Research Institute (AURI) led an initiative to define the value chains of the industrial hemp crop in MN. This presentation will focus on summarizing the various opportunities for Industrial Hemp from the viewpoints of Fiber, Food, Feed and Fuels. AURI has connections to many of the key players in this born-again industry and will provide an update on current research projects underway and the current status of the industry in MN.

**T3, Cannabis agronomics: Establishing best practices for floral hemp in the Southeast**—David Suchoff from North Carolina State University. This presentation will give an update on current and future hemp research in North Carolina and focus on key findings for hemp fertility, planting date, and density.

**3:30 pm—4:00pm—Break, visiting Exhibits, Networking**

**Session 5—4:00 pm - 5:00 pm**

**T1, Breeding and Production of feminized, day-neutral hemp seed**—Nick Stromberg of Beacon Hemp. A how to guide for producing and processing feminized autoflower seed and a cursory overview of breeding new day neutral lines.

**T2, Processing Panel**—Presentations with Dan Dolgin of JD Farms and Eaton Hemp in NY who will talk about the past, present, and future outlook for the industrial hemp market from seed to sale and all the various opportunities and challenges that lie within, and with Chas Gill from Merrymeeting Bay Hemp Company in Bowdoinham, Maine who will present on keeping it small and local.

**T3, UVM Research updates**—Dr. Heather Darby from UVM will share research updates and current projects.



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## On-Demand Presenters/Presentations, alphabetical

***These are pre-recorded sessions that can be accessed at anytime during the conference period.***

**Kadie Britt—Defoliation and corn earworm management in hemp.** The presentation will focus on defoliation experiments in grain and CBD hemp and how this damage affected physical and chemical yield in crops. In the 2020 season, a corn earworm-focused insecticide trial was focused and results will be shared. **CEU IPM 0.5 Credit**

**John Bruce—UVM hemp research update.** Hear about flower, fiber, and grain research projects being conducted right here in VT. Updates on varieties, planting date, fertility, and storage will be highlighted. **CEU CM 0.5 Credit**

**Mike DiTomasso and Bob Shipman—Required testing, sampling, and updates from the Vermont Hemp Program.** Mike and Bob from the VT Hemp Program will discuss testing, sampling, and updates. Bob will address the specific tests required for hemp crops, hemp products, and hemp-infused products, and will discuss the action limits for potency and contaminants. In addition, Mike will provide insight into the new virtual inspection program, best practices for sampling, and the 2021 registration process. **CEU PD 0.5 Credit**

**Jessilyn Dolan—Conscious cannabis -Picking your F.L.O.W.E.R.S.** With increasing medical marijuana sales and the booming CBD market, consumers and health care providers need information to make the best choices possible. Understanding what to use and recommend helps to assure consumer safety, accessibility and cannabis efficacy. We will walk you through how to pick your flowers and how to advocate for conscious clean cannabis. **CEU PD 0.5 Credit**

**Alex Escher—Hitting critical premium CBD flower benchmarks.** Presentation on *From Harvest to Retail*, including *premium CBD flower*, preventable harvesting mishaps, post-harvest steps to be taken to successfully process a quality grade product, and benchmarks that must be met to give growers a competitive edge. **CEU CM 0.5 Credit**

**Herrick "Rick" Fox—Bad news/Good news in regs for hemp farmers.** Major flaws remain in USDA Final Rule, NY & CA regulators want to ban smokable flower and redefine hemp using 0.3% Total THC, but the new Administration's policy agenda offers hope. Rick, CEO of Meristem Farms and a former USDA policy staffer, will provide an up-to-the-moment review of these important developments. **CEU PD 0.5 Credit**

**Hannah Lacasse—Consumer perceptions of hemp-based products.** An analysis of consumer interest in hemp over time, how consumers perceive hemp production and products, data on consumption of CBD products, and a look at research to come. **CEU PD 0.5 Credit**

**Robert Lehmert—Effects of biochar additive on crop quality.** A summary of a peer-reviewed study (November 2020) covering methods and costs/benefits for growing 4 hemp crops per year -

indoors- using a micro-gasifier to supply all power and to produce biochar as an additive to growing media. **CEU SWM 0.5 Credit**

**Scott Lewins—A survey of disease and insect pests found on Northeastern industrial hemp in 2020.** Proper identification of disease and insect pests is crucial for developing an Integrated Pest Management approach that allows farmers to reduce inputs, prevent yield loss, and maintain a high quality product. During the 2020 growing season, we conducted a survey on 18 hemp farms located in CT, MA, ME, NY, and VT that represented various microclimates, pest pressures, and growing conditions found throughout the region. We documented the incidence and severity of diseases and insects found at flower development and just prior to harvest at each location. **CEU IPM 0.5 Credit**

**Tyler Mark—Economic Impacts of Hemp-Based Industries on Rural Communities.** No CEU credits were requested.

**Michelle McGinnis—Fine-tuning plant tissue nutrient survey ranges for hemp.** This session will provide an overview of published and on-going research conducted by NCSU and NCDA&CS working to fine-tune plant tissue nutrient survey ranges for hemp. Plant tissue analysis is an excellent tool to monitor in-season fertility and to help identify plant growth problems. Fine-tuning the current broad-ranges used by agronomic labs and advisors will better aid growers in nutrient management of their crop. **CEU NM 0.5 Credit**

**Eric von Wettburg—Costs and benefits of undersowing CBD Hemp with clovers instead of black plastic.** We have performed trials to compare the yields and costs of producing CBD hemp with black plastic groundcover versus undersowing plots with clovers. We find roughly equivalent yields, and trade-offs in weed growth, soil organic matter and soil nitrogen levels, and costs of seeds. We'll examine some of the challenges we faced in different groundcover options. **CEU CM 0.5 Crdt**

**Matthew Wood—Pesticide use and the worker protection standard (WPS) in production of hemp.** When using pesticides on hemp, one must be aware of the regulations that apply, whether they be the state of Vermont pesticide regulations, US Environmental Protection Agency (EPA) requirements, or federal Worker Protection Standard (WPS) regulations. These are in place to protect your hemp crop, workers on your farm, the environment, and you. This overview will sort out what you need to know to be compliant with pesticide rules. **CEU IPM 0.5 Credit**

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## Bios from all presenters, listed alphabetically by last name

**Dr. Gary Bergstrom** is professor of Plant Pathology and Plant-Microbe Biology at Cornell University where he leads research and extension programs on field crop diseases. Bergstrom is a fellow and past president of the American Phytopathological Society and a fellow of Cornell's Atkinson Center for a Sustainable Future.

**Kadie Britt** is a 4<sup>th</sup>-year PhD candidate in the Dept. of Entomology at Virginia Tech working with Dr. Thomas Kuhar, VA vegetable entomology specialist. Her doctoral research focus is on insect pest mgmt. in hemp. Kadie has worked with growers and Extension agents to learn about the issues faced by those growing hemp in field or indoor. Kadie earned her Master's degree in Entomology from the Univ. of TN.



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## Bios from all presenters, continued

**John Bruce** is an Extension Research Specialist at the University of Vermont and focuses on applied hemp research. He works with hemp growers on a variety of agronomic topics.

**Chris Callahan, PE**, is the Extension Associate Professor of Agricultural Engineering at the University of Vermont and focuses on postharvest handling and storage, protected culture, and sustainable energy. He works with hemp growers on handling, drying and curing, and storage systems.

**Whitney Cranshaw** is an Emeritus Professor of Entomology at Colorado State University, where he has conducted research, teaching and Extension focused largely on developing effective IPM strategies for insects and mites affecting horticultural crops in Colorado. Since 2010, he has been observing and studying issues associated with *Cannabis* spp. crops, and this interest has expanded greatly since 2015 when hemp production in Colorado began its rapid expansion. He has developed the Colorado State Hemp Insect Website and in 2019 produced the first review of insects/mites on hemp (along with co-author John McPartland) in the *Journal of Integrated Pest Management*. He is also the author of hundreds of publications related to insects and several books.

**Dr. Heather Darby** is an Agronomist with UVM Extension. Heather developed the UVM Hemp Program in 2015. She has conducted research on industrial hemp including projects to identify best management practices for grain, fiber, and flower production. Heather has also developed the first undergraduate hemp course for the UVM Plant and Soil Science Department.

**Dr. Jeanine Davis** is an associate professor and extension specialist in the Department of Horticultural Science at NC State University. Her program is focused on improving the economic and environmental sustainability of farming through new crop development and organic agriculture.

**Mike DiTomasso** is the Hemp Program Inspector with VAAFM. In addition to inspections, Mike handles the hemp registration process, aids in program development, and serves as a point of contact for technical assistance related to the program. Mike's background is in agricultural production, education, and food safety, having served the agricultural community in various capacities.

**Jessilyn Dolan, RN, CMT, CLD**, is a medical cannabis patient, having had over three dozen oral and maxillofacial surgeries herself. Jessilyn is a cultivating caregiver for another nurse in cancer remission. Jessilyn is Board of Director of the American Cannabis Nurses Association, President and founder of the Vermont Cannabis Nurse Association, and Vice President of the American Nurse Association-Vermont. Jessilyn co-founded NurseGrown Organics, Vermont hemp and CBD, after years of research and not being able to find any local CBD products that met the appropriate and in depth lab testing and formulation standards necessary to ensure consumer safety. Jessilyn is proud to be Vermont's first Clean Green Certified hemp farm!

**Daniel Dolgin** is the co-owner of JD Farms, the first hemp farm in NY, and CEO/Co-Founder of Eaton Hemp, an organic hemp wellness brand. Dan's career has literally led him from the White

House to the farmhouse having spent most of his previous career working at the National Counterterrorism Center before leaving for greener pastures.

**Jahala Dudley** of Fox Holler Farms, a cut-flower and hemp based in Colchester, VT, is a cannabis professional with a Vermont policy background, cultivation, and extraction experience.

**Benjamin Edwards** is a member of the eighth generation on the Schoppee Farm, Ben has a diverse background ranging from biochemistry to electrical engineering to business consulting. He is currently absorbed with building a trusted, sustainable, and vertically integrated hemp farm that delivers only the purest seed to shelf products in a responsible manner.

**Alex Escher** is the Founder of Hemp Hollow Processing and Regional Leader for the US Hemp Building Association, Alex offers mobile trimming and bucking services for smokable CBD flower growers in Vermont and New York. His past engagement with local farms yields invaluable insight and recommendations for a successful future harvest.

**Herrick "Rick" Fox** is CEO of Meristem Farms, a Vermont producer of distinctive hemp crops and consumer products, and a proponent of policies for equitable value chains that support hemp farming of all shapes and sizes. Prior to starting Meristem Farms, Rick worked 15 years with USDA, working in National Forest management, agricultural capacity building, and policymaking roles with senior USDA officials and the US Senate Committee on Agriculture.

**Chas Gill** is a cofounder of Merrymeeting Bay Hemp Company in Bowdoinham, Maine. Chas and his wife Linda have been growing cut flowers and herbs for over 30 years retailing at local farmers markets. Over the past 3 years, they have transitioned into hemp production. Currently 10 CBD products are manufactured and marketed on their website and one farmers market per week.

**Riley Gordon** graduated with honors from Brandon University with a Bachelor of Science degree in Physics (Mathematics minor) in the spring of 2014. In 2017, he earned a Bachelors degree in Civil Engineering with Environmental emphasis in water related topics at the University of Minnesota-Twin Cities. As an engineer, Riley will be applying the skills he gained through his education and related industry experience to assist in AURI's (Agricultural Utilization Research Institute) broad range of projects and initiatives. He primarily works out of the Coproducts Lab in Waseca, MN, but will also apply his skillsets to all four focus areas that encompass AURI's work. Riley is originally from Brandon, Manitoba, Canada.

**Becky Goetsch** earned her doctorate in Molecular Biology from Yale in 2005 and spent a decade in the biotechnology sector, first as a scientist and then in various sales/marketing roles. Switching gears entirely in 2015, she left the corporate world and joined her partners family farm, Running Brook Farms, a mid-sized garden center located in Killingworth, CT. In addition to growing annuals and perennials, Running Brook Farms specializes in growing hemp for smokable flower and herbal teas.



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## Bios from all presenters, continued

**Sarah Grubin** is with Massachusetts Department of Agricultural Resources (MDAR), Division of Crop and Pest Services. She is MDAR's Hemp Program Coordinator. Sarah earned her MS in Entomology from Oregon State University, where she studied integrated pest management and biological control. Sarah began working with MDAR in 2013, as an insect survey and detection specialist for the Cooperative Agricultural Pest Survey Program. Sarah has led the MA Industrial Hemp Program since its beginning in 2018, helping to build the program from the ground up. Sarah's hobbies include needlework, music, and she also enjoys spending time with family, friends, and her adorable dog Stanley.

**Suzy Hodgson** is a sustainable agriculture specialist with UVM Extension Center for Sustainable Agriculture.

**Hannah Lacasse** is a graduate student in the Department of Community Development and Applied Economics at UVM.

**Robert Lehmert** is a Managing Member at Carbon Negativity, LLC, a research and consulting firm with offices in Berlin, VT. The firm networks with similar firms world-wide to combat climate change and build rural economic resiliency. It identifies and spotlights novel technologies and opportunities for ecosystems economic activity.

**Scott Lewins** is the Entomology Extension Educator with UVM Extension Northwest Crops & Soils Program, Extension Coordinator with the Agroecology and Livelihoods Collaborative, and Lecturer in the department of Plant and Soil Science at UVM. Scott has worked with a multitude of growers in the region on various crop systems, with a focus on sustainable pest management. He is a key individual on various grant-funded hemp research projects with Dr. Heather Darby, and together they have also developed and taught an undergraduate course on Introduction to Hemp Production at UVM.

**Tyler Mark** is an associate professor of production economics in the Department of Agricultural Economics at the University of Kentucky and Director of Graduate Studies. His applied research interests include hemp economics, broadband availability in rural areas, precision agriculture, and precision dairy.

**Dr. Michelle McGinnis** oversees the Agronomic Division Field Services Section within the NC Department of Agriculture & Consumer Services (NCDA&CS). Field Services is comprised of 13 regional agronomists who support the division's agronomic labs (soil testing, plant analysis, solution analysis, waste & compost analysis, soilless media analysis, and nematode assay) and who provide on-farm consultations specializing in soil fertility, plant nutrition, nutrient management, and nematode management. Dr. McGinnis is also adjunct faculty with the Horticultural Science Department at NC State University (NC SU).

**Dr. John McPartland** first learned about medicinal herbs at Boy Scout Camp, by none other than Euell Gibbons. John began cannabinoid research in 1981—the last person issued a DEA Schedule I license to cultivate *Cannabis* before the Reagan War On Drugs. He's consulted for GW Pharmaceuticals since 1999, but primarily earns his keep as an osteopathic physician in Middlebury.

**Dr. Timothy Murray** is the Director of Quality Assurance at Gaia Herbs in Brevard, North Carolina.

**Dr. Omar A. Oyarzabal** is a food safety scientist at UVM with expertise in the safe manufacturing of food products. Most of Omar's work involves helping food manufacturing with food safety training, regulatory compliance, and pass and maintain industry-driven food safety audits.

**Dr. Bob Pearce** is an Extension Professor and Interim Director of Hemp Programs in the College of Agriculture, Food and Environment at the University of Kentucky. His research focus is on agronomic management practices for field production of hemp for fiber, grain and floral components.

**Gretchen Schimelpfenig, PE**, is the Technical Director of Resource Innovation Institute (RII) and manages the organization's educational curriculum, Technical Advisory Council, and the Cannabis PowerScore resource benchmarking platform.

**Bob Shipman** is the Compliance Specialist for the Cannabis Quality Control Program with VAAFM. Bob develops standards for hemp testing and laboratory certification. His experience in environmental and forensic testing has prepared him for reviewing laboratory procedures with an emphasis on the ISO/IEC 17025 format.

**Stephanie Smith** is the Cannabis Quality Control and Policy Administrator at the Vermont Agency of Agriculture, Food & Markets, where she participates in the development and implementation of policies and programs supportive of the agricultural industry. She is focused on designing and implementing Vermont's Hemp Program and the Cannabis Quality Control Program. She holds a Bachelor of Arts in Environmental Studies from Boston University and a Master of Landscape Architecture from the University of Georgia.

**Harold Stanislawski** is the Business Development Director for the Agricultural Utilization Research Institute (AURI). Harold works with AURI staff and clients to further the development of agricultural commodities, coproducts, renewable energy, food and bio-based materials. One position Harold previously held was at the University of Minnesota Extension Service where he was responsible for educational programming in agronomy and later in ag business and farm management economics. Harold received his Master's Degree in agriculture education from North Dakota State University and has completed the International Economic Development Council's economic development credit analysis course and profit mastery training.

**Jennifer Starr** is Research and Extension Support Specialist in the Field Crop Pathology Program at Cornell University. Starr has extensive experience in disease diagnosis and fungal biology in forestry, veterinary, and agricultural settings.

**Nick Stromberg** is a hemp and cannabis horticulturalist and breeder. Nick received a BS. and MS. from University of California Davis in Environmental Horticulture & Agronomy and has been growing and breeding high CBD cannabis since 2012 and doing so under hemp regulations since 2016.

**Dr. David Suchoff** is the Alternative Crops Extension Specialist in the Department of Crop and Soil Sciences at NC State. His work focuses on new and emerging crops that fit in North Carolina's large acreage row crop production systems.



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## Bios from all presenters, continued

**Eric von Wettberg** is an associate professor of crop genetics and the director of UVM's Food Systems graduate program. His research group aims to protect crop genetic diversity and develop crops for more sustainable agricultural systems.

**Rose Wilson** is a business planning and marketing development consultant who has been specializing in farm and valued added production since 2004.

**Matthew Wood** studied Wildlife Biology and Forestry at the University of Massachusetts in Amherst in the late 1980s before getting a job at a USDA laboratory on Cape Cod researching Gypsy Moths and Mediterranean fruit flies. Matt moved to Vermont in 1996 to attend the University of Vermont under a master's program researching biological controls of downy mildew on hops. He was also the assistant manager of the greenhouse at UVM, and later managed outdoor perennial and greenhouse bedding plant production at a Vermont Nursery. In 2005 Matt joined the Vermont Agency of Agriculture, Food & Markets as the pesticide certification & training coordinator. He became an inspector that conducts routine sampling and inspections and responds to complaints concerning pesticides, feeds, seeds, and fertilizers within his territory in northwestern Vermont.

**Mary Yurlina** is the Hemp Program Manager, Maine DACF-Division of Animal and Plant Health. Mary arrived at Maine's Hemp Licensing Program by way of the Maine Natural Areas Program, the Maine Organic Farmers and Gardeners Association, and a few other side pursuits. Although restoration ecology was her specialty in graduate school, she has spent much of the past two decades in Maine working with farmers. Over a dozen years managing MOFGA's organic certification program taught her a lot about agricultural licensing and working with USDA. Botanically inclined, Mary has met a lot of plants and she has to admit that hemp is one of the most interesting. She hopes it becomes a profitable and sustainable crop for Maine.



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Additional funding provided by the University of Minnesota Digital Center for Risk Management Education Center under USDA/NIFA Award Number 2018-70027-28584. USDA and the University of Vermont are equal opportunity providers and employers. Issued in furtherance of Cooperative Extension work, Acts of May 8 and June 30, 1914, in cooperation with the United States Department of Agriculture. University of Vermont Extension, Burlington, Vermont. University of Vermont Extension, and U.S. Department of Agriculture, cooperating, offer education and employment to everyone without regard to race, color, national origin, gender, religion, age, disability, political beliefs, sexual orientation, and marital or familial status. Any reference to commercial products, trade names, or brand names is for information only, and no endorsement or approval is intended.

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