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Meet John Lord, Entrepreneur and Member of the ICR Governing Board

John Lord is a successful entrepreneur who has founded, built, and sold several consumer products companies. Prior to founding LivWell, Lord created a successful baby products company that sold products into Walmart, Toys 'R Us, and Target stores. After selling the company, he was drawn to the marijuana industry by the opportunity to apply his business acumen to a fledgling industry.

Mr. Lord worked hard to put LivWell at the forefront of the cannabis industry. By blending marijuana culture and solid business principles he has created an organization with a strong brand presence in a very cluttered marketplace and which provides the best possible customer experience.

Since entering the industry, Mr. Lord has been a proactive member of the cannabis business community. John's involvement has increased with his keen interest in the scientific approach to marijuana research. His goals are to make cannabis more relevant to the public as a commodity rather than a controversy and help dispel the negative connotations associated with cannabis. Serving on the Institute of Cannabis Research (ICR) Governing Board will allow John to be directly involved in helping accomplish those goals.



Dr. SangHyuck Park - Senior Scientist with the ICR

Growing External Research Partnerships

The Institute of Cannabis Research (ICR) has been working towards collaborations with external organizations. This includes a collaboration with Chuncheon Bioindustry Foundation (CBF), South Korea, that builds off of an existing partnership. Other research collaborations in development include projects with GrowDoc, and the Trichome Institute.

The Chuncheon Bioindustry Foundation (CBF) received an award as part of the national grant through the Ministry of Science and Information and Communications Technology (MSIT) in South Korea. The CBF will receive an award totaling about \$13 million. Once the agreement with CBF is finalized, The ICR will serve as a sub-recipient the ICR receiving about \$200,000 over the next five years (July 2021 – Dec, 2025) to develop and optimize a cannabinoid extraction method for therapeutic studies. The ICR senior scientist, Dr. Sang-Hyuck Park will lead this portion of the project entitled ‘Developing R&D Infrastructure for

the Industrial Uses of Hemp and its Derivatives in South Korea” along with multiple international collaborators.

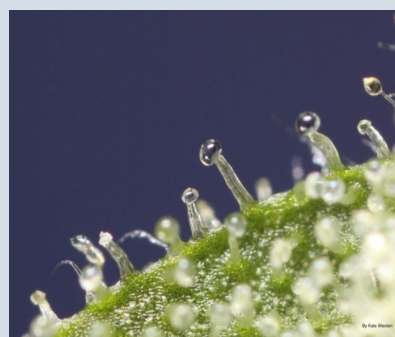
The second collaboration nearing launch pending agreement finalization is with industry partner GrowDoc, a company utilizing artificial-intelligence systems for rapid identification of causes of unhealthy *Cannabis* plants. The ICR will produce hemp under conditions that simulate nutrient deprived growth for nitrogen, phosphorus, sulfur, and magnesium. For this



work high CBD-yielding hemp varieties will be produced under these conditions and monitor physiological changes by photographing the plant images during their life cycle. The ICR will be conducting the research under supervision of Dr. Sang-Hyuck Park and involving student research assistants in the process. With the high quality images and videos documented from this study, Artificial Intelligence (AI) capabilities that GrowDoc employs to accurately diagnosing unhealthy cannabis plants will be substantially improved

An unhealthy *Cannabis* sp. and AI-assisted early diagnosis

The ICR hopes to engage in a third project in agreement with Trichome Institute. In addition to research interests the Trichome Institute engages in education that teaches students about the more technical aspects of cannabis while evaluating thousands of cannabis samples microscopically for quality certifications. In the course of microscopic analysis of cannabis samples the Trichome Institute spotted a unique trichome that was clearly different from the six known cannabis trichomes. The ICR has been chosen as a partner to evaluate this potential new discovery using more advance microscopy techniques. This project which will be led by Dr. Eun-Soo Kim, a Visiting Scientist with the ICR, is to provide a series of microscopic evidences using a high-resolution scanning electron microscopy to determine if the Trichome Institute have in fact discovered glandular trichomes on the cannabis plant unknown to science thus far.



Glandular Trichomes Found in *Cannabis* spp.



Journal of Cannabis Research

The *Journal of Cannabis Research* (JCR) is the official publication of the Institute of Cannabis Research. It is the only broadly multidisciplinary journal of cannabis research, encompassing not only clinical and scientific research, but also research into social, business, economic, legal, environmental, and ethical impacts of cannabis use and the changing legal status of cannabis. To learn more about the aims and scope of the journal as well as submission guidelines, please visit:

[Journal of Cannabis Research](#)

Here are two recently published articles in the JCR that may be of interest:

[Cannabis sativa and/or melatonin do not alter brain lipid but alter oxidative mechanisms in female rats](#)

[Study of \$\Delta\$ 9-tetrahydrocannabinol \(THC\) and cannabidiol \(CBD\) extraction FROM dried oral fluid spots \(DOFS\) and LC-MS/MS detection](#)

Cannabis Research Webinar Series

The Institute of Cannabis Research launched its webinar series last fall and is set to launch the second season of the Webinar Series in partnership with the [Lambert Center](#) for the Study of Medicinal Cannabis and Hemp.

September Webinar: The ICR and Lambert Center are pleased to host Dr. Gillian Schauer, for the webinar on September 9th, at 1:00PM MT.



Dr. Gillian Schauer

Title: Delta-8 THC and other THC Analogs: Public Health and Safety Considerations

Gillian Schauer, PhD, MPH, is the Executive Director of the Cannabis Regulators Association (CANNRA) and a Senior Consultant on cannabis policy, epidemiology, and research translation. Her consulting has included work with the U.S. Centers for Disease Control and Prevention, the National Institute on Drug Abuse, and a number of U.S. states. Dr. Schauer is also affiliated as a Research Scientist at the Addictions, Drug & Alcohol Institute at the University of Washington. Prior to her work in cannabis policy, Dr. Schauer worked in tobacco prevention and control. She has more than 65 peer-reviewed publications on cannabis, tobacco, and co-use, and was a Senior Editor on the 2020 Surgeon General's Report on Smoking Cessation. She has a PhD from Emory University in Behavioral Science, a Master of Public Health from the University of Washington, and a Bachelors of Science from Northwestern University.

The webinar is free to attend and you may register by [Clicking Here](#).

Previous Webinars

Did you know that you can access all of the previous webinars in this series? All of the [webinar presentations](#) are archived on the ICR's website and viewable through the ICR's YouTube channel. You are encouraged to peruse past webinars for topics of interest and view them at your convenience. Of if you would like to go back to a webinar that you attended to re-view the information presented it is available for you.

Monthly Webinar

September 9, 2021: Dr. Gillian Schauer: Delta-8 THC and other THC Analogs: Public Health and Safety Considerations

Gillian Schauer, PhD, MPH, is the Executive Director of the Cannabis Regulators Association (CANNRA) and a Senior Consultant on cannabis policy, epidemiology, and research translation. Her consulting has included work with the U.S. Centers for Disease Control and Prevention, the National Institute on Drug Abuse, and a number of U.S. states. Dr. Schauer is also affiliated as a Research Scientist at the Addictions, Drug & Alcohol Institute at the University of Washington. Prior to her work in cannabis policy, Dr. Schauer worked in tobacco prevention and control. She has more than 65 peer-reviewed publications on cannabis, tobacco, and co-use, and was a Senior Editor on the 2020 Surgeon General's Report on Smoking Cessation. She has a PhD from Emory University in Behavioral Science, a Master of Public Health from the University of Washington, and a Bachelors of Science from Northwestern University.

[CLICK HERE TO REGISTER](#)

Previous Webinars Videos

- + JULY 2021 - DR. ZIVA COOPER, LOOKING BEYOND DELTA-9-THC
- + JUNE 2021 - DR CLAYTON W SNELL, A DEEP DIVE INTO EPIDIOLEX
- + MAY 2021 - AJAY NAYAK & GEORGE HODGIN, ACADEMIC AND BUSINESS PERSPECTIVES OF COMPLIANCE IN CANNABIS RESEARCH
- + APRIL 2021 - DR. CRISTINA SEMPIO, CANNABINOID AND ENDOCANNABINOID IN HUMAN BREAST MILK
- + MAR 2021 - DR. SARA JANE WARD, PHYTOCANNABINOID, TERPENES, AND NEUROPATHIC PAIN
- + FEBRUARY 2021 - DR. ASHLEY BROOKS-RUSSELL, CANNABIS IMPAIRED DRIVING AND QUESTIONS ABOUT TOLERANCE
- + DECEMBER 2020 - DR. MAHMOUD A. ELSOHLI, CANNABIS DERIVED PRODUCTS FROM THE UNIVERSITY OF MISSISSIPPI
- + NOVEMBER 2020 - DR. DAVID SHURTLEFF, CANNABINOID RESEARCH FUNDING OPPORTUNITIES AT NCCIH
- + OCTOBER 2020 - DR. STEPHANIE MCGRATH, CANNABIS USE IN PETS



The Lab of Dr. Rachel Thayer at University of Colorado Colorado Springs (UCCS) is seeking Research Participants!

Dr. Rachel Thayer, Assistant Professor of Psychology at UCCS, is currently investigating how cannabis use can impact cognitive function with aging.

Are you an adult age 60 years or older who has used cannabis in the last year? Please consider participating in a research study investigating cannabis use and health with aging, or forwarding this information to someone you know who might be interested.

To qualify, you must be 60 years old or older, have used cannabis within the last year, and reside in the United States. This study is conducted entirely online. The purpose of this study is to determine what measures of cannabis use, like quantity, frequency, duration, or potency, are most related to everyday cognitive function (Part 1) and cognitive test scores such as attention and memory (Part 2) in older adults. If you agree to participate, you will answer survey questions that should take about 1 hour (Part 1). At the end of the survey, you will be asked if you would like to be considered for Part 2 of the study, which is a greater time commitment. If you are invited to participate in Part 2, you will answer brief survey questions about your cannabis use once per week for several weeks, and then you will meet with a researcher to complete an interview and cognitive testing using Zoom videoconferencing (approximately 3 hours total to complete Part 2). You will be compensated for your time with electronic gift (e.g., Amazon) cards.

If you are interested in getting more information or signing up to participate, please email mj cognitionstudy@gmail.com. Your participation is completely voluntary, and you can choose to be in the study or not and to stop at any time. This study is approved by the Institutional Review Board (IRB) at the University of Colorado Colorado Springs (UCCS).

The views and opinions expressed in this article are those of the author and do not necessarily reflect the official policy or position of the ICR or of CSU Pueblo.

The Institute of Cannabis Research is now accepting donations to support future cannabis research. You, our friends, colleagues and supporters, have the ability to help us continue to support cutting edge research by donating to the ICR Research Fund. We hope you will consider contributing to this important opportunity to enhance our understanding of the applications and impacts of cannabis. All donations contributed are tax deductible. Please consider a year-end donation. To donate or to get more information please click on the donate button:

Donate Here

Another Conference is Successfully in the Books!

Cannabis researchers from across North America and the Globe gathered virtually to participate in the Cannabis Research Conference (CRC) 2021 August 3-5. Nearly a year of planning, reviewing session proposals and abstracts, and developing the program by the [CRC Programing Committee](#) resulted in a diverse and robust research conference. The Programing Committee worked with Conference Producer [D.Plump Consulting](#) to make the virtual conference a reality. The conference included over 100 presentations by more than 150 presenters with topics ranging from “Global Trends in Cannabis Science and Hemp Industry” to “Cannabis, the Brain, and Neurological Disease”. The CRC 2021 was supported by 33 generous [sponsors](#). Much of the information about the conference can be found on the [CRC 2021 website](#) including the full program book.

While the Institute of Cannabis Research and Co-Host [Global Hemp Innovation Center](#) (GHIC) had hoped that the conference would be held in an in-person format, conditions simply were not right for that yet. Hopefully, conditions will continue to improve and the CRC 2022 will be in-person. With the partnership between the ICR and GHIC to Co-Host the conference, we will begin to see the venue for the in-person conference varied. In fact the CRC 2022 will be held at the Oregon State University’s Cascades Campus in Bend, OR August 8-10, 2022. If you are actively engaged in cannabis research and looking for a venue to dis-

seminate the results of your work, the CRC series might be the right opportunity for you. Keep an eye out for information about the upcoming CRC 2022 on the ICR website and in this newsletter.



Dr. Chad Kinney working behind the scenes at the CRC 2021 Virtual Conference

