



Saturday, 4 April

8am **Breakfast**  
*OSC Ball Room*

8:30am **Opening Plenary**  
*OSC Ball Room*

10am **Coffee Break**  
*OSC Ball Room*

10:30am **1A: Medical - Physiological Conditions, Part A**  
*A. Tundra (48)*  
Chaired by: Dr. Thorsten Rudroff

10:30am **Cannabis for Neuropathic Pain in Multiple Sclerosis—High Expectations, Poor Data**  
» [Dr. Thorsten Rudroff](#)

11am **Pilot Study On Cerebral Glucose Metabolism In People With Multiple Sclerosis – Effects Of Chronic Use Of Δ-9-tetrahydrocannabinol (Thc) And Cannabidiol (CBD)**  
» [Dr. Craig Workman](#), Dr. John Kindred, Dr. Laura Ponto, Dr. John Kamholz, Dr. Thorsten Rudroff

11:30am **Treating Alzheimer's Disease with Cannabis Medicine: A Landmark Clinical Trial in Colorado**  
» [Dr. Tyrell Towle](#), Mr. Scott Karolchyk

10:30am **1B: The Road Ahead: CDOT & Partners Present Latest Marijuana-Impaired Driving Data, Trends, Research and Education Efforts Panel**  
*B. Great Plains (48)*  
Chaired by: Mr. Sam Aspnes

10:30am **The Road Ahead: CDOT & Partners Present Latest Marijuana-Impaired Driving Data, Trends, Research and Education Efforts**  
» [Mr. Sam Aspnes](#), [Mr. Sam Cole](#), [Mr. Glenn Davis](#), [Dr. Denise A. Valenti](#)

10:30am **1C: Cannabis Plant: Cannabis Physiology**  
*C. Aspen Leaf (36)*  
Chaired by: Dr. Nirit Bernstein

10:30am **Regulation of Secondary Metabolism in Medical Cannabis by Environmental and agronomic Factors**  
» [Dr. Nirit Bernstein](#)

11am **What is A Glandular Trichome in Cannabis, And What is A Major Function of Secretory Cavity?**  
» [Dr. EunSoo Kim](#)

11:30am **Experimentation on Removal of Heavy Metals From Water by Using Single and Combined Filtration Systems With Hemp Based Fibers and Zeolites**  
» [Dr. Leonardo Bedoya-Valencia](#), Mrs. Adriana Riveros-Gonzales, Dr. Yaneth Correa-Martinez, Dr. Richard Farrer

10:30am **1D: Dosing and Data to Enable the Prescription Pad in Cannabis, Part A**  
*D. Wolf Den (24)*

10:30am **Dosing and Data to Enable the Prescription Pad in Cannabis Medicine**  
» [Mr. David Gordon](#)

11am **Improving the Cannabis Dosing Regimen with Data**  
» [Mr. Brooks Lustig](#)

10:30am **1E: Mass Media Panel**  
*E. Cottonwood (36)*  
Chaired by: Mrs. Kristina Etter



Continued from **Saturday, 4 April**

10:30am **The Rise of Mass Media in Cannabis: A Past, Present, and Future of Cannabis Media**

» [Mrs. Kristina Etter](#)

12pm **Lunch**

*OSC Ball Room*

1:30pm **Poster Session**

*OSC Ball Room*

**Growing Hemp in Utah's Unique Soils**

» [Mr. Jeffrey Colbert](#), Dr. Katharina Schramm

**Hu-211 Sensitive, Cognitive Learning and Memory Processes Modulate Glun2b Surface Expression in the Mouse Brain**

» Prof. Jeffrey P. Smith, Ms. Amy Uhernik, [Mr. Jose Vigil](#)

**Novel task measures acute induction of and recovery from rumination in anxious population**

» [Mr. Mohammad Habib](#), Dr. Leah Hitchcock, Dr. Cinnamon Bidwell

**Impact of Marijuana Use on the Gut Microbiome in Relation to Overall Anxiety Levels**

» [Mr. Jerry Ma](#), Mr. Nicholas Gonyea, Dr. Jarrod Ellingson, Ms. Renee Martin-Willett, Prof. Cinnamon Bidwell

**How does CBD Modulate Learning and Memory in Humans?**

» [Mr. Alfredo Vargas](#), Ms. Jordan Lafebre, Ms. Lavinia Bispo, Ms. Hanna Gebregzi, Dr. Libby Stuyt, Prof. Jeffrey P. Smith, Prof. Moussa Diawara

**Motives Matter: Marijuana Use Motives Moderate the Links between Stress and Negative Affect**

» [Mr. Nicholas Glodosky](#), Ms. Amanda Stueber, Ms. Emily LaFrance, Mr. Dakota Mauzay, Dr. Carrie Cuttler

**Over-Baked: Adverse Reactions to Cannabis**

» [Ms. Amanda Stueber](#), Ms. Emily LaFrance, Mr. Nicholas Glodosky, Mr. Dakota Mauzay, Dr. Carrie Cuttler

**Comparison of Cannabidiol and Citalopram in targeting Fear Memory in Female Mice**

» Prof. Jeffrey P. Smith, Ms. Amy Uhernik, [Mr. Jose Vigil](#)

**A Cross-Sectional and Prospective Comparison of Medicinal Cannabis Users and Controls on Self-Reported Health**

» [Mr. Joel Munson](#), Mr. Nicolas Schlienz, Mr. Ryan Vandrey

**Effects of Dietary Hempseed on Developmental Changes in Body Composition and Arterial Blood Pressure in Female C57BL6 Mice**

» [Ms. Hailey Streff](#), [Mr. Derrick Williams](#), Prof. Cynthia Blanton, Prof. Annette Gabaldon

**The Potential of Whole Hemp Seed as a Prebiotic to Support Growth and Metabolism of Anticarcinogenic Probiotic Bacteria In Vitro**

» [Mrs. Whitney Lujan](#), Prof. Annette Gabaldon, [Ms. Krystal Hrbac](#)

**Minimum Performance Evaluation for Rapid Salmonella and Shiga-toxin producing Escherichia coli tests for Cannabis and Cannabis-infused products.**

» [Ms. Jess Paoletti](#), Mr. Brian Moore

**Analysis of Full-spectrum Cannabinoids by Liquid Chromatography/Quadrupole-Time-of-Flight Mass Spectrometry (LC/QTOF-MS)**

» [Dr. Imma Ferrer](#), Dr. Michael Thurman, Dr. Randall Shearer, Dr. Robert Sievers

**Light Spectrum Potentially Influences Morphological and Chemical Characteristics in Cannabis sativa L. Throughout Growth and Development**

» [Mr. Trevor Regas](#), Dr. Brian Vanden Heuvel, Dr. Sanghyuck Park



Continued from **Saturday, 4 April**

**Behavioral Economic Demand for Cannabis: An Preliminary Extension to High Potency Concentrates**

» [Mr. Alex Napolitan](#), Dr. Leah Hitchcock, Dr. Meenu Minhas, Dr. James MacKillop, Dr. Cinnamon Bidwell

**Aqueous THC and CBD stability in aluminum containers with various polymeric surface coatings and glass**

» [Dr. Brent Trela](#)

**The Creation of Electrospun Nanofibers Derived from Lignin and Cellulose Extracted from Hemp Biomass Using Deep Eutectic Solvents**

» [Mr. Jacob Mutz](#), Mr. Guy Mendel, Mr. Benjamin Highfill, Dr. Richard Farrer

**Extraction of Cellulose from Hemp Biomass for the Production of Electrospun Nanofibers**

» [Mr. Guy Mendel](#), [Mr. Benjamin Highfill](#), Mr. Jacob Mutz, Dr. Richard Farrer

**Targeting Upstream Pathways to Predict Compound Profiles in Cannabis and Hemp**

» [Ms. Kimberlee Neubauer](#), Mr. Christopher Pauli, Mr. Anthony Torres, Dr. Reggie Gaudino

**A Spatial Investigation of Cannabinoids in Type III Cannabis Roots**

» [Mr. Caleb King](#), Ms. Caroline Brugge, Mr. Christopher Pauli, Ms. Kimberlee Neubauer, Dr. Reggie Gaudino, Dr. Kymron DeCesare

**Nanopore NGS Panel for Examination of Key Genes on Cannabinoid and Terpenoid Synthetic Pathways**

» [Ms. Jerian Reynolds](#), Ms. May Cui, Mrs. Manmeet Kaur, Dr. Kelly Sveinson, Dr. John Brunstein

**DNA fingerprinting of Cannabis Sativa using Short Tandem Repeat elements**

» [Mr. Anthony Torres](#), Mr. Christopher Pauli, Ms. Kimberlee Neubauer, Dr. Reggie Gaudino

**A Literature Analysis on Medicinal Use and Research of Cannabis in the Meiji Era of Japan**

» [Dr. Byungsoo Ahn](#), Mr. Seokhyun Kang, Mr. Kyunghoon Lee, Ms. Seoyoon Kim, Dr. Jin Sung Park, Dr. Hyung-Sik Seo

**Exploring Factors to Mitigate Customers' Perceived Risk of Cannabis-related Products**

» [Dr. Laee Choi](#)

**The Potential of Hemp as a Remediation Tool for the Uptake of Heavy Metals and Metalloids**

» [Mr. Trevor Regas](#), Ms. Amanda Fullard, Mr. Shawna Overby, Dr. Brian Vanden Heuvel, Dr. Chad Kinney, Dr. Jim Carsella, Dr. Nate Bickford

**Soil, Hydroponic, and Aquaponic Cultivation: The Effect on Morphological and Chemical Characteristics in Cannabis sativa L.**

» [Mr. Trevor Regas](#), Dr. Nate Bickford

1:30pm **2A: Medical - Pain, Stress, Sleep And Psychiatric Disorders Panel, Part A**  
*A. Tundra (48)*  
Chaired by: Dr. Karen Yescavage

1:30pm **Cannabis Use and Psychological Pain**  
» [Dr. Karen Yescavage](#), Dr. Connie McLaughlin-Miley

1:30pm **2B: Cannabis Legalization and Public Policy**  
*B. Great Plains (48)*  
Chaired by: Mr. David Bush

1:30pm **2017 to the Present, What's New with the "Legal" Status of Cannabis?**  
» [Mr. David Bush](#), [Dr. Linda Schutjer](#)

1:30pm **2C: Genomics And Genetics Of Cannabis, Part A**  
*C. Aspen Leaf (36)*  
Chaired by: Dr. Sanghyuck Park



Continued from **Saturday, 4 April**

- 1:30pm **Draft Genomes of Two Hemp Accessions, Carmagnola C24 and USO31**  
» [Dr. Sanghyuck Park](#), [Dr. Jianwei Zhang](#)
- 2pm **Structural Variation in Terpene and Cannabinoid Synthase Gene Clusters Across Five Cannabis Genomes.**  
» [Dr. Keith Allen](#)
- 2:30pm **A Single Nucleotide Polymorphisms assay sheds light on the extent and distribution of genetic diversity in cultivated North American Cannabis**  
» [Dr. Philippe Henry](#), Dr. Cindy Orser
- 1:30pm **2D: Dosing and Data to Enable the Prescription Pad in Cannabis, Part B**  
*D. Wolf Den (24)*  
Chaired by: Dr. Randall Shearer
- 1:30pm **Characterization of Commercial CBD Isolates from Colorado Hemp**  
» [Dr. Randall Shearer](#), Dr. Robert Sievers, Mr. Kupaaikakaiao Thomas, Ms. Emma Cohen, Dr. Imma Ferrer
- 2pm **A Simple Online Extraction LC/LC Atmospheric Pressure Ionization (APCI) MS/MS Assay for the Analysis of 17 Cannabinoids and Metabolites in Human Plasma**  
» [Dr. Cristina Sempio](#), Dr. Jelena Klawitter, Ms. Nohemi Almaraz-Quinones, Mrs. Wanzhu Zhao, Dr. George Sam Wang, Dr. Kelly Knupp, Dr. Uwe Christians, Dr. Jost Klawitter
- 1:30pm **2E: Mass Media**  
*E. Cottonwood (36)*  
Chaired by: Mrs. Kristina Etter
- 1:30pm **Mass Media in the Cannabis Industry: The Good, The Bad, and The Ugly**  
» [Mrs. Kristina Etter](#)

- 2pm **Medical Cannabis and the Media: A Symbiotic Relationship**  
» [Ms. Alice O'Leary Randall](#)
- 2:30pm **Podcasts on Cannabis: Educational, Political, or Public Health Risk?**  
» [Prof. Xeno Rasmusson](#), Ms. Sitalbanat Muktari
- 3pm **Coffee Break**  
*OSC Ball Room*
- 3:30pm **3A: Medical - Pain, Stress, Sleep And Psychiatric Disorders, Part B**  
*A. Tundra (48)*  
Chaired by: Dr. Carrie Cuttler
- 3:30pm **Short- and Long-Term Effects of Cannabis on Headache and Migraine**  
» [Dr. Carrie Cuttler](#), Dr. Alexander Spradlin, Dr. Michael Cleveland, Dr. Rebecca Craft
- 4pm **Chronic Cannabis-Induced Alterations in Stress Reactivity**  
» [Mr. Nicholas Glodosky](#), Dr. Carrie Cuttler, Dr. Timothy Freels, Dr. Ryan McLaughlin
- 4:30pm **Initiating Clinical Trials with Cannabis Products**  
» [Dr. Emily Lindley](#), Dr. Jacquelyn Bainbridge, Dr. Heike Newman
- 3:30pm **3B: Research Administration and Collaborations**  
*B. Great Plains (48)*  
Chaired by: Dr. Heather Kimmel
- 3:30pm **Marijuana Research at the National Institute on Drug Abuse**  
» [Dr. Heather Kimmel](#)
- 4pm **Cannabis Attitudes and Knowledge Are Associated With Cannabis Use in a Population-based Survey of Active Adult Athletes**  
» [Dr. Joanna Zeiger](#), Dr. William Silvers, Dr. Edward Fleegler, Dr. Robert Zeiger



Continued from **Saturday, 4 April**

- 3:30pm **3C: Genomics And Genetics Of Cannabis, Part B**  
*C. Aspen Leaf (36)*  
Chaired by: Dr. Daniela Vergara
- 3:30pm **Cannabis Genetic Map**  
» [Dr. Daniela Vergara](#)
- 4pm **Using High Throughput Genotyping in Hemp Breeding Applications**  
» [Mr. Christopher Pauli](#), Mr. Anthony Torres, Ms. Kimberlee Neubauer, Dr. Reggie Gaudino
- 4:30pm **Insecticidal Property of Cannabidiol: CBD Disrupts Exoskeleton Development of Tobacco Hornworm (*Manduca sexta*)**  
» [Mr. Sam Koch](#), Dr. Sanghyuck Park, Mr. Matthieu Conroy
- 3:30pm **3D: Cannabis Harm Reduction**  
*D. Wolf Den (24)*  
Chaired by: Mr. Kyle Boyar
- 3:30pm **Investigating Alcohol and Cannabis Co-use in a Survey Sample of Regular Cannabis Users and a Clinical Sample of Heavy Drinkers Enrolled in Alcohol Treatment**  
» [Dr. Hollis Karoly](#), Ms. Chrysta Andrade, Ms. Alexandra Zabelski, Dr. Cinnamon Bidwell, Dr. Kent Hutchison
- 4pm **Spanish Language Cannabis and Health Survey: Improving Diversity and Representation in Community-Based Cannabis Research**  
» [Ms. Renee Martin-Willett](#), Ms. Elizabeth Zambrano Garza, Dr. Cinnamon Bidwell
- 4:30pm **Heavy Metal Contaminants in Cannabis Vaporizers: Valid Concern or Blowing Smoke?**  
» Mr. Kyle Boyar, Mr. Ini Afia, [Mr. Robert Weltman](#)

- 3:30pm **3E: Cannabis Industry**  
*E. Cottonwood (36)*  
Chaired by: Prof. Suzanne Owens-Ott
- 3:30pm **CPAs and the Cannabis Industry in Colorado and Washington: Results of Quantitative and Qualitative Research on CPA Perspectives**  
» [Prof. Suzanne Owens-Ott](#), Dr. Richard Ott
- 4pm **Colorado Overhauls Marijuana Business Ownership Structure**  
» [Dr. Craig Small](#)
- 5:30pm **Networking Events**  
*OSC Ball Room*

**Sunday, 5 April**

- 8am **Breakfast**  
*OSC Ball Room*
- 8:30am **4A: Medical - Pain, Stress, Sleep And Psychiatric Disorders, Part C**  
*A. Tundra (48)*  
Chaired by: Mr. Joel Munson
- 8:30am **A Cross-Sectional and Prospective Comparison of Medicinal Cannabis Users and Controls on Self-Reported Health**  
» [Mr. Joel Munson](#), Mr. Nicolas Schlienz, Mr. Ryan Vandrey
- 9am **Cannabis for Pain Management and Opioid Use Reduction**  
» [Dr. Jordan Tishler](#)
- 9:30am **Short- and Long-term Effects of Cannabis on Post-Traumatic Stress Disorder**  
» [Ms. Emily LaFrance](#), Dr. Carrie Cuttler



Continued from **Sunday, 5 April**

- 8:30am **4B: Public Policy and Regulation, Part A**  
*B. Great Plains (48)*  
Chaired by: Mr. David Bush
- 8:30am **Hemp Regulation by States and Indian Tribes Under the New Regime of Cooperative Federalism**  
» [Mr. David Bush](#)
- 9am **Finding a Path Forward: The Legal and Regulatory Status of CBD**  
» [Mrs. Stacey Worthy](#)
- 9:30am **Seed-to-insight™ Cannabis Solution Provides Overlooked Chain of Custody Piece in Hemp Cultivation**  
» [Mrs. Terri Miller](#)
- 8:30am **4C: Cannabis Natural Products Chemistry: Analytics & Preparative Methods**  
*C. Aspen Leaf (36)*  
Chaired by: Dr. Toby Astill
- 8:30am **Overcoming the Challenges Associated with Pesticide Analysis of Cannabis & Hemp Samples and Understanding the Matrix Effects**  
» [Dr. Toby Astill](#), Dr. Avinash Dalmia
- 9am **What is in Your CBD--Oil, Gel, and Pills? :Is THC Always or Never Present?**  
» [Dr. Michael Thurman](#), Dr. Imma Ferrer, Dr. Randall Shearer, Dr. Robert Sievers
- 9:30am **An Insight into the Cuticle of the Cannabis Plant and Why a Better Chemical Understanding is Needed**  
» [Mr. Adam Wilson](#), Dr. Joseph DiVerdi

- 8:30am **4D: Public Health and Education**  
*D. Wolf Den (24)*  
Chaired by: Dr. Karen Yescavage
- 8:30am **Innovation of Cannabis Education**  
» [Dr. Andrea Holmes](#)
- 8:45am **Public Health Implications of Cannabis Policies**  
» [Ms. Jessica Neuwirth](#)
- 8:30am **4E: Industrial Hemp**  
*E. Cottonwood (36)*  
Chaired by: Prof. Nebojsa Jaksic
- 8:30am **Rheological Characteristics of Hemp Fiber/PLA Composites for Fused Filament Fabrication**  
» [Prof. Nebojsa Jaksic](#), Prof. Mel Druelinger, Mr. Akhter Zia
- 9am **Methods of Extraction of Biopolymers from Hemp Biomass and Production of Electrospun Nanofibers from Extracted Materials**  
» Mr. Jacob Mutz, Mr. Benjamin Highfill, Mr. Guy Mendel, [Dr. Richard Farrer](#)
- 9:30am **On the Search for a Scaling Law of Seed Treatment With Magnetic Fields: Improving Cannabis Plant Performance**  
» [Dr. Kathrin Spendier](#), Ms. Ming Chih Tsai, Ms. Kendra Engstrom
- 10am **Coffee Break**  
*OSC Ball Room*
- 10:30am **5A: Medical - Cannabis Interventions for Neurological Symptoms: The Way Forward**  
*A. Tundra (48)*  
Chaired by: Dr. Barbara Brett
- 10:30am **The Effects of Medicinal Cannabis Use on Adults With Medically Refractory Epilepsy: a Progress Report**  
» [Dr. Barbara Brett](#)



Continued from **Sunday, 5 April**

11am **Safety and Efficacy of Medical Cannabis to Treat Autism Spectrum Disorder Compared to Commonly Used Medications**

» [Dr. Richard Holdman](#), Ms. Elyse Contreras

11:30am **Results of Exploring the Information Practices of Cannabis Nurses**

» [Ms. Connie Pascal](#)

10:30am **5B: Public Policy and Regulation Panel**

*B. Great Plains (48)*

Chaired by: Ms. Rebecca Laurie

10:30am **Cultivating Colorado's Hemp Industry Blueprint: Establishing the Colorado Hemp Advancement and Management Plan**

» [Ms. Rebecca Laurie](#)

10:30am **5C: Pest And Weed Management Panel (Zoom)**

*C. Aspen Leaf (36)*

Chaired by: Hannah Wilner

10:30am **Remote Presentation - New Automated Technology has the Potential to Improve Weed Control in Cannabis**

» [Dr. Steve Fennimore](#)

10:30am **5D: Economic and Social Impact, Part A**

*D. Wolf Den (24)*

Chaired by: Prof. Chris Duvall

10:30am **The Global Medicinal Cannabis Industry is Generating Political-economic Inequities in Africa**

» [Prof. Chris Duvall](#)

11am **Comparing the Economic Feasibility of using Plastic Biodegradable Mulches in Vegetable and Cannabis Production**

» [Dr. Margarita Velandia](#)

11:30am **Does Cannabis Policy Affect Jobs and Wages in Other Industries?**

» [Prof. Patrick Radigan](#)

10:30am **5E: Phytochemicals: Cannabinoids and Terpenes**

*E. Cottonwood (36)*

Chaired by: Dr. Anna Schwabe

10:30am **The Potency Reported on Dispensary Cannabis Flower May Be Inaccurate Due to Lack of Standardized Testing Protocols**

» [Dr. Anna Schwabe](#)

11am **Thermal and Light Degradation of Cannabinoids and Terpenes From Cannabis Sativa Samples From an Industrial Hemp Farm in Lafayette, Colorado**

» [Mr. Kupaaikekaiao Thomas](#), Dr. Randall Shearer, Dr. Bob Sievers

11:30am **The Aroma of Cannabis: Chemical, Commercial, and Legal Aspects**

» [Dr. Avery Gilbert](#)

12pm **Mechoulam Lecture and Lunch**

*OSC Ball Room*

2pm **6A: Medical - Adverse Effects**

*A. Tundra (48)*

Chaired by: Dr. Leah Hitchcock

2pm **Acute Effects of Concentrated Cannabis on Motor Control and Speed: Smartphone-Based Mobile Assessment**

» [Dr. Leah Hitchcock](#), Dr. Brian Tracy, Dr. Cinnamon Bidwell

2:30pm **Subjective Adverse Effects by Method of Cannabis Administration**

» [Ms. Raeghan Mueller](#), Dr. Leah Hitchcock, Mr. Parker Gross, Dr. Kent Hutchison, Dr. Cinnamon Bidwell

2pm **6B: Public Policy and Regulation, Part B**

*B. Great Plains (48)*

Chaired by: Dr. Stephen Ziegler





Continued from Sunday, 5 April	
2pm	<b>Ex Post Evaluation: A New Paradigm in Drug Control Policy</b> » <a href="#">Dr. Stephen Ziegler</a>
2:30pm	<b>Green isn't Green: The Environmental Burden of Cannabis Cultivation</b> » <a href="#">Ms. Hailey Summers</a> , Dr. JASON QUINN, Mr. Evan Sproul
2pm	<b>6C: Practical Weed Management in Outdoor Hemp Cultivation, Part A</b> <i>C. Aspen Leaf (36)</i> Chaired by: Prof. Alan Smith
2pm	<b>Profit Sharing as Means of Improving Product Quality and Mitigating Labor Cost Risks in Hemp Cultivation</b> » <a href="#">Prof. Alan Smith</a>
2:15pm	<b>Equipment for Mechanical Cultivation of Hemp: Tool Calibration and Techniques for Mechanical Weed Control</b> » <a href="#">Mr. Sam Hitchcock Tilton</a>
2pm	<b>6D: Identifying and Overcoming Potential Challenges Along the Hemp Supply Chain</b> <i>D. Wolf Den (24)</i> Chaired by: Ms. Rebecca Laurie
2pm	<b>Identifying and Overcoming Potential Challenges Along the Hemp Supply Chain.</b> » <a href="#">Ms. Rebecca Laurie</a>
2pm	<b>6E: Quality Assurance and Quality Control of Cannabis Products</b> <i>E. Cottonwood (36)</i> Chaired by: Dr. John Brunstein

2pm	<b>Systematic Variety Naming in Cannabis: Necessity and Approaches</b> » <a href="#">Dr. John Brunstein</a> , Ms. May Cui, Ms. Jerian Reynolds
2:30pm	<b>Divalent Metals at the Plant-fungal Interface: Investigations of Iron and Copper on Growth of Penicillium Spinulosum on Hemp Seed Meal</b> » Prof. Sandra Bonetti, Dr. Jim Carsella, <a href="#">Ms. Tezla Neighbours</a>
3pm	<b>Coffee Break</b> <i>OSC Ball Room</i>
3:30pm	<b>7A: Medical - Physiological Conditions, Part B</b> <i>A. Tundra (48)</i> Chaired by: Dr. Maureen Leehey
3:30pm	<b>Cannabis and the Treatment of Cancer: A Rational, Data-Driven Approach</b> » <a href="#">Dr. Jordan Tishler</a>
4pm	<b>A Randomized, Double-blind, Placebo Controlled, Parallel Study of Tolerability and Efficacy of Cannabidiol on Motor Symptoms in Parkinson Disease: Interim Report on Tolerability</b> » <a href="#">Dr. Maureen Leehey</a> , Dr. Ying Liu, Dr. Stefan Sillau, Dr. Sarah Fischer, Dr. Jost Klawitter, Dr. Cristina Sempio, Dr. Michelle Fullard, Dr. Trevor Hawkins, Dr. Lauren Seeberger, Mr. Emil Diguilio, Mr. David VU, Ms. Sarah Baker, Mr. Tristan Seawalt, Dr. Grace Chin, Dr. Jacquelyn Bainbridge
4:30pm	<b>Cannabis: A Remediation Treatment</b> » <a href="#">Dr. Liz McNeill</a>
3:30pm	<b>7B: Public Policy and Regulation (International Perspective)</b> <i>B. Great Plains (48)</i> Chaired by: Mr. Frank Robison
3:30pm	<b>International Insights: Exporting/Importing Cannabis Products and Technology Today and in the Future.</b> » <a href="#">Mr. Frank Robison</a>





Continued from **Sunday, 5 April**

- 4pm **Chuncheon Bioindustry Foundation and Cannabis**  
» [Dr. Meehwa Shin](#)
- 4:30pm **Medical Cannabis and CBD Clinical Research - The New Normal**  
» [Ms. Christina DiArcangelo](#)
- 3:30pm **7C: Practical Weed Management in Outdoor Hemp Cultivation, Part B**  
*C. Aspen Leaf (36)*  
Chaired by: Prof. Alan Smith
- 3:30pm **Evaluation of Conventional Herbicides for Weed Control in Industrial Hemp**  
» [Dr. Eric Westra](#), Dr. Scott Nissen
- 4pm **Cover Crops, Pros and Cons**  
» [Mr. Don Hajar](#)
- 4:30pm **Biopesticides for Weed Control**  
» [Mr. Matthew Brecht](#)
- 3:30pm **7D: Economic and social impact, Part B**  
*D. Wolf Den (24)*  
Chaired by: Dr. Santiago Guerra
- 3:30pm **Cannabis and Cartels, Marijuana and Mexicans: Cannabis Legalization and the United States-Mexico Border in Ethnographic Perspective**  
» [Dr. Santiago Guerra](#)
- 4pm **Introduction of Industrial Hemp to Arkansas River Valley Agriculture and Social/Cultural Impact**  
» [Mr. Michael Stephen](#)

- 4:30pm **The Future of the Cannabis Industry in an Era of Climate Change**  
» [Dr. Dexter Russell](#)
- 3:30pm **7E: Fiber Characterization**  
*E. Cottonwood (36)*  
Chaired by: Dr. Colin Bell
- 3:30pm **Scientifically Driven Solutions to Maximize Plant Yield and Quality**  
» [Dr. Colin Bell](#)
- 4pm **Colorado's 2019 Hemp Growing Season – Nature's Lessons**  
» [Dr. Robert Sievers](#), Dr. Randall Shearer, Mr. Kupaaikaiaio Thomas, Ms. Emma Cohen, Dr. Imma Ferrer, Dr. Michael Thurman
- 4:30pm **Archaeal Antioxidant Used to Increase Plant Growth**  
» [Ms. Amanda Fullard](#), Dr. Rebecca Roston, Dr. Nicole Baun, [Dr. Nate Bickford](#), Mr. Trevor Regas
- 5:30pm **Reception**  
*Sangre de Cristo Arts & Conference Center*

**Monday, 6 April**

- 8am **Breakfast**  
*OSC Ball Room*
- 8:30am **8A: Medical - Cannabis: Allergy, Respiratory and Immunology Correlates**  
*A. Tundra (48)*  
Chaired by: Dr. William Silvers
- 8:30am **Cannabis: Adverse Allergic, Immunologic, & Respiratory Correlates**  
» [Dr. William Silvers](#), Dr. Ajay Nayak



Continued from **Monday, 6 April**

9am **The Effects of Cannabidiol on Abnormal Proliferation and Inflammation in Human Rheumatoid Arthritis Fibroblast-like Synoviocytes and Triple Negative Breast Cancer Cells**  
 » [Ms. Yoon Gyeong Lee](#), Dr. Sanghyuck Park, Dr. Kyungho Lee

8:30am **8B: Big Data in Public Health**  
*B. Great Plains (48)*  
 Chaired by: Dr. Cindy Phillips

8:30am **How the Academic Community Can Develop A Big Data System for the Hemp Industry – The Grow Press Project**  
 » [Dr. Cindy Phillips](#)

9am **Werehab: a Mobile Application to Help Cannabis Rehabilitation**  
 » [Dr. Yoanna Long](#), Dr. Kuang-Yuan Huang, Ms. Xiao Cui, Mr. Michael Zamora, Mr. David Lichliter

9:30am **The Effect of Marijuana Legalization on the Marijuana Use among Colorado Adolescents**  
 » [Ms. Xiao Cui](#), Mr. Andrew Li

8:30am **8C: Cannabinoid Pharmacology**  
*C. Aspen Leaf (36)*  
 Chaired by: Mr. Andres Gandara

8:30am **Emulsification of Cannabinoids Through Low and High Energy Processes**  
 » [Mr. Andres Gandara](#), Dr. Stephen Cape

9am **Scaling Up Pharmaceutical Production for a Gmp Cannabis Facility**  
 » [Ms. Stefanie Maletich](#)

9:30am **A Simple Online Extraction LC/LC Atmospheric Pressure Ionization (APCI) MS/MS Assay for the Analysis of 14 Endocannabinoids and Related Compounds in Human Plasma**  
 » Dr. Cristina Sempio, Dr. Jelena Klawitter, Mr. Matthew Jackson, Dr. Cinnamon Bidwell, Dr. Kent Hutchison, Dr. Uwe Christians, [Dr. Jost Klawitter](#)

10am **Coffee Break**  
*OSC Ball Room*

10:30am **9A: CDA, CSU Extension and Role of Higher Education**  
*A. Tundra (48)*  
 Chaired by: Ms. Rebecca Laurie

10:30am **The Need for a Center of Excellence**  
 » [Ms. Rebecca Laurie](#)