18th Annual International Conference on the Science of Botanicals (ICSB)

DAY 1 (MONDAY, APRIL 8)

SESSION 1: “25 Years Of DSHEA: Historical Perspective”
Loren Israelsen, President, United Natural Products Alliance and Mark Blumenthal, Founder & Executive Director, American Botanical Council

10:15-10:30 Break

SESSION 2: “25 Years Of Dietary Supplements Health And Education” - OCC Auditorium
Moderator and Session Chair: Robin Marles, Senior Scientific Advisor, Health Canada

10:30-10:45 Joe Betz, Acting Director, Office of Dietary Supplements, National Institute of Health
“The NIH Office Of Dietary Supplements: A Twenty-Five Year Retrospective”

10:45-11:00 Craig Hopp, Deputy Director, Division of Extramural Research, National Center for Complementary and Integrative Health, National Institutes of Health
“TBA”

11:00-11:15 Tieraona LowDog, Integrative Medicine Concepts, LLC
“25 Years Of DSHEA: A Physician’s Perspective”

11:25-11:50 Stephen Daniells, Editor-in-Chief, William Reed Business Media
“That Editor’s View Of The Evolving Global Natural Products Marketplace”

11:50-12:00 Conference Photograph-Meet at OCC side patio across from Cedar Room Dining Hall.

12:00-1:00 Lunch - OCC Cedar Room Dining Hall

SESSION 3: “International Perspectives On Botanical Research Part 1” - OCC Magnolia
Moderator and Session Chair: Shabana Khan, Principal Scientist, University of Mississippi

1:00-1:30 Ameenah GuribFakim, Professor, Founder, Ameenah Gurib-Fakim Foundation, Mauritius
“African Traditional Knowledge As Source Of Leads For Innovative Ingredients”

1:30-2:00 Carla Holandino Quaresma, Professor, Pharmacy College, Federal University of Rio de Janeiro
“Therapeutic Potential Of Natural Products: Research And Development”

2:00-2:30 Iqbal Choudhary, Director, International Center for Chemical and Biological Sciences, University of Karachi
“Natural Products And Microbial Biotechnology Based Drug Lead Discovery-Recent Examples Of Our Work”

2:30-3:00 Break (30min)

SESSION 4: “Natural Products Discovery And Development” - OCC Magnolia
Moderator and Session Chair: Xing-Cong Li, Principal Scientist, University of Mississippi

3:00-3:15 Susan Murch, Professor, University of British Columbia
“Breadfruit (Artocarpus altilis): An Example Of The Potential Of A Traditional Underutilized Crop For Modern Foods, Cosmetics And Natural Health Products”

3:15-3:30 Nirmal Pugh, Principal Scientist, University of Mississippi
“The Mushroom Microbiome: Significance Of Microbial-Derived Components To The Macrophage Stimulatory Activity Of Edible Mushrooms”

3:30-3:45 Jeffrey Langland, Research Department Chair, Southwest College of Naturopathic Medicine
“Controlling The Threat Of Herpes And Ebola Viruses: The Mechanism Of Action And Active Constituents Of Melissa officinalis”

3:45-4:00 Swarna D Hapurachchi, Institute of Indigenous Medicine, University of Colombo
“Hypoglycaemic Effect Of Munronia pinnata In Type 2 Diabetics On Diet Control”

4:00-4:15 Pang-Chui Shaw, Professor, the Chinese University of Hong Kong
“Berberine Protects C17.2 Neural Stem Cells From Oxidative Damage And Induces Their Neuronal Differentiation”

4:15-4:30 Mohamed Albadry, Researcher, University of Mississippi
“Isolation, Structure Elucidation And Synthesis Of Natural Products; Efficient Tools For Dealing With A Needle In A Haystack”

SESSION 5: “DSHEA At 25: Is The FDA Enforcing The Law Or Is DSHEA Unenforceable?” - OCC Auditorium

4:30-5:15 Pieter Cohen, Associate Professor of Medicine, Harvard Medical School

6:00-8:00 pm Reception/Mixer Lyric 1006 Van Buren Ave, Oxford, MS 38655-Award Presentation: Outstanding Contribution in Natural Products Research

1/11/2019 10:28 AM
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**SESSION 6:** “FDA And CFSAN Update On The Science And Regulation” - OCC Auditorium

**Moderator and Session Chair:** Sibyl Swift, Special Assistant, Office of Dietary Supplement Programs/CFSAN, Food and Drug Administration

8:30-10:00

- Steven Tave, Director, Office of Dietary Supplement Programs, FDA, Center for Food and Safety & Applied Nutrition
  “TBA”
- Gregory Noonan, Division Director, Center for Food Safety & Applied Nutrition
  “New Approaches To The Analysis And Regulation Of Dietary Supplements”
- Jason Humbert, CDR, USPHS, Health Fraud, Office of Regulatory Affairs, FDA
  “Dietary Supplements That Contain Hidden, Harmful Ingredients Continue To Be A Public Health Concern”

10:00-10:30

**Break**

**SESSION 7:** “TCM Research And Development” - OCC Magnolia

**Moderators and Session Chairs:** Jinhui Dou, Vice Dean, Yiling Pharmaceuticals, Inc.

10:30-10:50

De-an Guo, Professor, Shanghai Institute of Materia Media, Chinese Academy of Sciences
“TCM Research: Challenges, Current Status And Future Perspectives”

10:50-11:10

Hua Yang, Professor, China Pharmaceutical University
“Synergistic Combination Discovery From Herbal Medicines”

11:10-11:30

Wansheng Chen, Director of Department of Pharmacy, Changzheng Affiliated Hospital of Second Military Medical University
“Biosynthesis And Metabolic Regulation Of Lignans In Isatis indigotica”

11:30-11:50

Thomas Effrert, Professor, Institute of Pharmacy and Biochemistry, Johannes Gutenberg University
“Network Pharmacology And Precision Medicine For Cancer Therapy With Natural Products”

12:00-1:00

**Lunch**

**SESSION 8:** “Analytical Methodology” - OCC Magnolia

**Moderators and Session Chairs:** Bharathi Avula, Principal Scientist, University of Mississippi

1:00-1:20

Naren Meruva, Water Corporation
“Real-Time Authentication Of Botanicals By Direct Mass Spectrometry Using DART-MS And LiveID Analysis”

1:20-1:40

Maged Sharaf, Director of Scientific Business Development, Camag Scientific
“Is It Ginkgo?”

1:40-2:00

Jimmy Yuk, Water Corporation
“Accurate Compound Identification Of Complex Traditional Herbal Medicine Using A Novel Mass Spectrometry Acquisition Method”

2:00-2:20

Culying Ma, Senior Scientific Liaison, U.S. Pharmacopeia
“Quality Control Of Botanicals With USP Botanical Monographs—HPLC And HPTLC Identify Plant Products And Distinguish Closely Related Species”

2:30-3:00

**Break**

**SESSION 9:** “Natural Product Discovery And Development” - OCC Magnolia

**Moderator and Session Chair:** Nirnmal Pugh, Principal Scientist, University of Mississippi

3:00-3:15

Rahul Pawar, Research Chemist, Office of Regulatory Science, FDA, Center for Food Safety & Applied Nutrition
“Analysis Of Bitter Orange Containing Dietary Supplements By LC-MS/MS.”

3:15-3:30

Xing-Cong Li, Principal Scientist, University of Mississippi
“Exploring Antimicrobial Natural Products As Food Preservatives”

3:30-3:45

Willmer Perera, Ironstone Separations, Inc.
“Stevia rebaudiana And Its Tetracyclic Diterpene Glycosides As A Source Of High-Potency Sweeteners.”

3:45-4:00

Lauren Erland, Department of Plant Agriculture, University of Guelph
“Melatonin in Diets And Dietary Supplements”

4:00-4:15

Aihua Liu, Director of Research & Development, Dyad labs
“Fast, Sensitive And Comprehensive Assay To Quantify 112 Pesticide Residues In Botanical And Non-Botanical Dietary Supplements Using LC/MS/MS And GC/MS/MS Coupled With QuECHERS Extraction Method”

4:15-4:30

Javed Musarrat, Vice-Chancellor, Baba Ghulam Shah Badshah University
“Tomato (Solanum lycopersicon) As A Model For Toxicity Assessment Of Metal Oxide Nano-Pollutants: A Study On Plant Growth Dynamics And Cell Death”

4:30-4:45

Sayeed Ahmad, Researcher, Jamia Hamdard University
“Metabolomic Analysis Of Unani And Ayurvedic Medicines For Scientific Validation Of Traditional Claims”

5:30-8:00

**Poster Session Chair:** Amar Chittiboyina

5:30-8:00

**Dinner—OCC Cedar Room Dining Hall**
SESSION 10: “Cannabis-derived Therapeutics: New Developments”
- OCC Auditorium
**Moderator and Session Chair:** Larry Walker, Director Emeritus, University of Mississippi

8:15-8:40 Cassandra Taylor, Chemist, Science Staff, Immediate Office, Office of Pharmaceutical Quality/CDER, FDA
“FDA Role In Regulation Of Cannabis Products”

8:40-9:05 Tom Marcotte, Professor of Psychiatry, Co-Director, Center for Medicinal Cannabis Research, University of California, San Diego
“The Changing Landscape In Medicinal Cannabis Research”

9:05-9:30 John Ingram, Children’s Neurology, University of Mississippi Medical Center
“Cannabis Extract For Drug Resistant Pediatric Epilepsy—What Have We Learned So Far”

9:30-9:55 Alice Mead, Vice President, US Professional Relations, Greenwich Biosciences
“How Cannabis-Derived Medications Go Through The FDA Approval Process”

10:00-10:30 Break

SESSION 11a: “Global Regulations of Herbal Medicines” OCC Auditorium
**Moderator and Session Chair:** Michael Smith, Consultant, MIS Consulting

10:30-12:00
- Adam Gibson, Vice President, Public Affairs, Consumer Health Products Canada
  “Canadian Natural Health Products Regulations”
- Armando Caceres, Professor, University of San Carlos of Guatemala
  “Regulation Of Natural Health Products In Latin America – Current Situation And Future Developments”
- Jon Wardle, Senior Lecturer in Public Health, University of Technology Sydney
  “Australian Regulatory Reforms For Traditional And Complementary Medicines: Challenges, Opportunities, And Lessons Learned”

SESSION 11b: “Cannabis: Safety, Quality and Regulations” - OCC Magnolia
**Moderator and Session Chair:** Mahmoud ElSohly, Research Professor, University of Mississippi

10:30-10:50 Igor Koturbash, Associate Professor and Vice-Chair, University of Arkansas for Medical Sciences
“Hepatotoxicity Of Cannabidiol In The Mouse Model”

10:50-11:10 James Neal-Kababick, Director, Flora Research Laboratories, LLC
“Novel Screening Method (SYNCAN) For 370 Synthetic Cannabinoids By Accurate Mass Q-TOF Mass Spectrometry”

11:10-11:30 Phil Wylie, Sr. Research Scientist, Agilent Technologies
“Ensuring The Safety Of Cannabis By Screening For Approved And Unapproved Pesticide Residues”

11:30-11:50 Thomas Sadilek, Director of Governmental Affairs, International Cannabis & Cannabinoids Institute
“Low THC Products Regulation At European Level - Current Status And Its Future”

12:00-1:00 Lunch

**Moderators and Session Chairs:** Larry Walker, Director Emeritus, University of Mississippi & Trish Flaster, Executive Director, Botanical Liaisons, LLC

1:00-2:30
- Hilary Bricken, Attorney, Harris Bricken
- Josh Hendrix, KY Hemp Industry Association & US Hemp Roundtable
- Courtney Moran, Attorney, Earth Law, LLC
- James N. Kababick, Director, Flora Research Laboratories

2:30-3:00 Afternoon tour of NCNPR facilities or Medicinal Plant Garden

3:00-5:00 ICSB Yard Games and Crawfish Boil-OCC grounds

5:00-9:00 Dinner and Bowling and Arcade fun- Premier Lanes-204 Commonwealth Boulevard, Oxford, MS 38655
SESSION 12: “International Perspectives on Botanical Research part 2” - OCC Auditorium
Moderator and Session Chair: Ryan Yates, Principal Scientist, University of Mississippi
8:30-9:00 Zhenhua Jia, Dean, Yiling Pharmaceutical
“Further Development Of Chinese Herbal Medicines Through Collaborations-The Yiling Pharmaceutical’s Approach”
9:00-9:30 Ibrahim Jantan, Professor, School of Pharmacy, Faculty of Health and Medical Sciences, Taylor’s University
“Modulatory Effects Of Medicinal Herbs On The Immune System And Their Potential As Sources Of Immunomodulatory Dietary Supplements And Pharmaceuticals”
9:30-10:00 Mary Hardy, “The Effect Of DSHEA On Clinical Research In Dietary Supplements”

10:00-10:30 Break

SESSION 13: “Botanical Characterization and Quality Assessment” - OCC Magnolia
Moderator and Session Chair: Jing Li, Staff Fellow, FDA/CDER
10:30-10:50 Sara Handy, Research Biologist, Center for Food Safety & Applied Nutrition, Office of Regulatory Science, USDA
“Genomic Approaches Used By FDA-CFSAN To Understand Botanical Challenges And The Expansion Of Genometrackrcp”
10:50-11:10 Nicole Stevens, Research and Development Scientist, doTerra
“Essential Oil Chemical Biosynthesis”
11:10-11:30 Cody Beaumont, Sr. Director, QC & Analytical Services, doTerra
“Development Of A Chemical Fingerprint As A Tool To Distinguish Closely Related Tinospora Species And Quantitation Of Major Compounds”
11:30-11:50 Abidah Parveen, Researcher, University of Mississippi
“Further Development Of Chinese Herbal Medicines Through Collaborations-The Yiling Pharmaceutical’s Approach”

12:00-1:00 Lunch

SESSION 14: “Botanical Characterization and Quality Assessment” - OCC Board Room
Moderator and Session Chair: Ping Lin, Acting Director, National Institutes of Health
1:00-1:20 Zhibin Li, Deputy Director, Division of Extramural Research, National Institutes of Health
“Development Of A Chemical Fingerprint As A Tool To Distinguish Closely Related Tinospora Species And Quantitation Of Major Compounds”
1:20-1:40 Dongxia Hao, Research Biologist, Center for Food Safety & Applied Nutrition, FDA-CDER
“Genomic Approaches Used By FDA-CFSAN To Understand Botanical Challenges And The Expansion Of Genometrackrcp”
1:40-1:50 Jing Li, Staff Fellow, FDA/CDER
“Essential Oil Chemical Biosynthesis”
1:50-2:10 Nicole Stevens, Research and Development Scientist, doTerra
“Development Of A Chemical Fingerprint As A Tool To Distinguish Closely Related Tinospora Species And Quantitation Of Major Compounds”

2:10-2:30 Break

SESSION 15: “Pharmacopeial Standards as Tools to Assure Botanical Quality” - OCC Auditorium
Moderator and Session Chair: Nandakumara Sarma, Director, United States Pharmacopeia
3:00-3:20 Nandakumara Sarma, Director, Dietary Supplements and Herbal Medicines, United States Pharmacopeia
“Pharmacopeial Standards as Tools to Assure Botanical Quality”
3:20-3:40 Gabriel Giancaspro, Vice President-Science, Dietary Supplements and Herbal Medicines
“Pharmacopeial Standards as Tools to Assure Botanical Quality”
3:40-3:50 Ulrich Rose, Head of Division A, Deputy Head of European Pharmacopoeia Department (EPD), EDQM, Council of Europe
“Pharmacopeial Standards as Tools to Assure Botanical Quality”
3:50-4:10 Roy Upton, President, American Herbal Pharmacopoeia
“Pharmacopeial Standards as Tools to Assure Botanical Quality”
4:10-4:30 G N Singh, Secretary cum Scientific Director, Indian Pharmacopoeia Commission
“Pharmacopeial Standards as Tools to Assure Botanical Quality”
4:30-4:50 Vivekanandan Kalaiselvan, Principal Scientific Officer, Indian Pharmacopoeia Commission, Government of India (Ministry of Health & Family Welfare)
“Pharmacopeial Standards as Tools to Assure Botanical Quality”
4:50-5:10 De-an Guo, Professor, Shanghai Institute of Materia Media, Chinese Academy of Sciences
“Pharmacopeial Standards as Tools to Assure Botanical Quality”

Afternoon tour of NCNPR facilities or Medicinal Plant Garden

6:30 Closing Ceremony and Banquet (OCC Cedar Room)