Day One December 15, 2020

10:00-10:15 a.m. Opening Remarks:
Dr. Norman E. Sharpless, Director, National Cancer Institute, National Institutes of Health (NCI/NIH)
Dr. Robert Croyle, Director, Division of Cancer Control and Population Sciences, NCI/NIH (TBC)

10:15-10:30 a.m. Charge to Workshop: Dr. Gary Ellison, NCI/NIH

10:30–11:15 a.m. – **Keynote:** *Cannabis policy, epidemiology, and research in an era of legalization*, Dr. Gillian Schauer, CDC Foundation

**Session One: Recreational Cannabis Use and Cancer Epidemiology**
Co-Chairs: Gary L Ellison, NCI/NIH + Mia Hashibe, University of Utah
11:15 - 11:40 a.m. Mia Hashibe, Huntsman Cancer Institute: Cannabis and Cancer Risk: Current Evidence and Methodological Considerations
11:40 a.m. – 12:05 p.m. – Amy Cohn, Stephenson Cancer Center: Tobacco and Cannabis co-use
12:05 p.m. – 12:30 p.m. Benjamin Blount, Centers for Disease Control and Prevention, Harmful Smoke Exposure Resulting from Smoked Cannabis
Session I Panelists: Mia Hashibe, Amy Cohn, and Benjamin Blount

12:35-12:50 p.m. Break

**Session Two: Cannabis Use by Cancer Patients**
Co-Chairs: Andrew N. Freedman, NCI/NIH + Ilana Braun, Dana Farber Cancer Institute
12:50 p.m. – 1:15 p.m. - Ilana Braun, Dana Farber Cancer Institute: Cannabis’ Legal Landscape and Potential Clinical Implications
1:15 p.m. - 1:40 p.m. - Steven A. Pergam, Fred Hutchinson Cancer Research Center: Risks of Cannabis Use for the Cancer Patient
1:40 p.m. – 2:05 p.m. - Donald I. Abrams, University of California San Francisco: Benefits of Cannabis Use for the Cancer Patient
2:05 p.m. – 2:35 p.m. Panel Discussion
Session I Panelists:
Session II Panelists: Ilana Braun, Steven A. Pergam, Donald I Abrams and a Cancer Survivor (TBD)
Day Two December 16, 2020

Introduction and Orientation to Day 2: 10:00 – 10:10 a.m.
Session Three: Cancer Symptom/Treatment Side Effect Management – Preclinical

Co-Chairs: Yali Fu, NCI/NIH + Aron H. Lichtman VCU (TBC)
10:10 a.m. – 10:35 a.m. Aron H. Lichtman, VCU: Targeting the Endogenous Cannabinoid System to Treat Chemotherapy-induced Peripheral Neuropathy: Leads from Preclinical Studies

10:35 a.m. - 11:00 a.m. Daniele Piomelli: “Cannabis, the endocannabinoid System and Cancer Pain”
11:00 a.m. - 11:25 a.m. Sara Ward: “Cannabinoid-based treatment strategies for pain associated with cancer”
11:25 a.m. – 11:50 a.m. Linda Parker
11:50 a.m. - 12:20 p.m. Panel Discussion

12:20 – 12:35 Break

Session Four: Symptom/Treatment Side Effect Management – Clinical

Co-Chairs: Alexis Bakos, NCI/NIH + Mark Wallace, UCSD
12:35 p.m. - 1:00 p.m. Mark Wallace, University of California San Diego: Cannabis and Pain Relief
1:00 p.m. – 1:25 p.m. Peter Grimison, University of Sydney, Australia: The Role of Cannabis in Controlling Symptom Clusters: Nausea and Emesis
1:25 p.m. – 1:50 p.m. Aminah Jatoi MD, Mayo Clinic: Cancer-Associated Anorexia and Cachexia: Defining a Palliative Role for Cannabis
1:50 p.m. – 2:15 p.m. Michelle Sexton ND, University of California San Diego: The Role of Cannabis in Controlling Symptom Clusters: Anxiety & Depression
2:15 p.m. – 2:40 p.m. Carey S. Clark PhD, RN, Past President American Cannabis Nurses Association: Clinicians and Cannabis Care: Supporting the Patient’s Journey
2:40 p.m. – 3:10 p.m. Panel Discussion
Day Three December 17, 2020

Introduction and Orientation to Day 3: 10:00 – 10:10 a.m.

Session Five: Cancer Biology and Prevention

Co-Chairs: Sharon Ross, Ron Johnson, NCI/NIH + Sean McAllister, Sutter Health
10:10 a.m. – 10:35 a.m. Mary Abood, Temple University: Cannabinoid/Cannabis signaling and biology, introduction
10:35 a.m. - 11:00 a.m. Manuel Guzman, Complutense University of Madrid, Spain: CB1/CB2 receptors (THC agonist/ligand) and targeting cancer/psychoactive components as antitumor (THC ligand in cancer signaling)
11:00 a.m. - 11:25 a.m. Sean McAllister: CBD and other non-psychoactive components. Preclinical, antitumor activity through an interaction site in the mitochondria
11:25 a.m. – 11:50 a.m. Joseph Califano, UC San Diego, School of Medicine, Topic: “Cannabinoids promote progression of HPV positive head 1 and neck squamous cell carcinoma via 2 p38 MAPK activation”
11:50 a.m. - 12:20 p.m. Panel Discussion

12:20 – 12:35 Break

Session Six: Cancer Treatment – Cancer Treatment – Pre-Clinical & Clinical

Co-Chairs: Jeffrey White, NCI/NIH + Donald Abrams, UCSF
12:35 p.m. - 1:00 p.m. Guillermo Velasco – Towards the utilization of cannabinoids as anticancer agents
1:00 p.m. – 1:25 p.m. Ramesh Ganju – Cannabinoids-mediated novel signaling mechanisms in cancer: current status and future implications
1:25 p.m. – 1:50 p.m. Chris Twelves – A Phase 1b Randomized, Placebo-controlled Trial of Nabiximols Cannabinoid Oromucosal Spray with Temozolomide in Patients with Recurrent Glioblastoma
1:50 p.m. – 2:15 p.m. Gil Bar-Sela – Chronic cannabis used by patients with advanced cancer during Immunotherapy initiation: clinical outcomes and endocannabinoid levels evaluation
2:15 p.m. – 2:45 p.m. Panel Discussion
Day 4 December 18, 2020

Introduction and Orientation to Day 4: 10:00 – 10:10 a.m.

Session Seven: Navigating Research Challenges for Cannabis Research

Co-Chairs: Alejandro Salicrup, Senior Advisor for Global Health Research, Center for Global Health & OCCAM, NCI/NIH + Ziva D. Cooper, Research Director of the Cannabis Research Initiative at University of California at Los Angeles (UCLA)

10:10 a.m. – 10:30 a.m. Steve Gust, Director of International Program, National Institute on Drug Abuse (NIDA), National Institutes of Health: Updates on the Federal regulatory landscape, NIH research portfolio on cannabis/cannabinoids, and the NIDA Drug Supply Program

10:30 a.m. – 10:50 a.m. Douglas Throckmorton, Deputy Director for Regulatory Programs, Center for Drug Evaluation & Research, Food and Drug Administration (FDA): FDA Role in the Regulation of Cannabis Products

10:50 a.m. – 11:30 a.m. Ziva D. Cooper, UCLA and Donald Abrams, Professor Emeritus of Medicine, Department of Medicine, University of California, San Francisco (UCSF): Researchers point of view regarding challenges and hurdles related to clinical cannabis research

11:30 a.m.– 12:00 p.m. Panel Discussion

12:00 p.m. – 12:10 p.m. Brake

Concluding Session: What’s Next?

Co-Chairs: Gary Ellison and Jeffrey White, NCI/NIH

12:10 p.m. -1:30 p.m. Panel Discussion with all session external co-chairs

1:30 p.m. – 1:45 pm Final Comments