



NATIONAL CANCER INSTITUTE

DCTD Division of Cancer Treatment & Diagnosis

The State of the Science: Cancer Complementary and Alternative Medicine Therapeutics Research

May 25-26, 2016

Day 1, May 25, Building 60

Day 2, May 26, Building 38A LHA

NIH Bethesda Campus, 31 Center Dr, Bethesda, MD 20892

Agenda

Day 1

- 8:30 am** **Welcome**
Jeffrey White, MD, Office of Cancer Complementary and Alternative Medicine, DCTD, NCI, NIH
- 8:35 am** **Landscape of Cancer Therapeutic Research and Precision Medicine**
Meg Mooney, MD, Cancer Therapy Evaluation Program, DCTD, NCI, NIH
- 8:50 am** **Introduction**
Dan Xi, PhD, Office of Cancer Complementary and Alternative Medicine, DCTD, NCI, NIH
- 8:55 am** **NIH Cancer CAM Portfolio Analysis (Status, Gaps and Opportunities)**
Dan Xi, PhD, Office of Cancer Complementary and Alternative Medicine, DCTD, NCI, NIH
- 9:10 am -11:45 am** **CAM Intervention and Immune-modulators**
Moderator: Eric Bernhard, PhD, Radiation Research Program, DCTD, NCI, NIH
- 9:10 am** **PHY906 as Adjuvant for Cancer Chemotherapy and Radiation Therapy**
Yung-Chi Cheng, PhD, Yale University
- 9:35 am** **Nature Compound β -Glucan-mediated Tumor Immunotherapy**
Jun Yan, MD, PhD, University of Louisville

- 9:55 am** **Dietary Soy as a Modulator of Anti-tumor Immunity**
Gregory Lesinski, PhD, MPH, Ohio State University-via teleconference
- 10:15 am** **Break**
- 10:30 am** **Medicinal Mushrooms Overview and Cancer Treatment (Maitake Mushroom)**
Simon Yeung, PharmD, LAc, Memorial Sloan Kettering Cancer Center
- 10:45 am** **Polysaccharide Krestin (PSK) Medical Mushroom Clinical Trial**
Leanna Standish ND, PhD, LAc, FABNO, Bastyr University-via teleconference
- 11:05 am** **Panel Discussion**
- 11:45 am** **Lunch**
- 1:00 pm-3:05 pm** **Molecular Mechanisms, Drug Discovery and Systems/Network Pharmacology**
Co-Moderators: Weidong Lu, MB, MPH, PhD, Dana-Farber Cancer Center and Yung-Chi Cheng, PhD, Yale University
- 1:00 pm** **Green Tea and Cancer: Can EGCG Be an Effective Cancer Therapeutic Agent?**
Chung Yang, PhD, Rutgers, The State University of New Jersey
- 1:15 pm** **Molecular Mechanisms and Clinical Evaluation of Omega-3 Fatty Acids in Cancer**
Peiyong Yang, PhD, The University of Texas MD Anderson Cancer Center
- 1:30 pm** **Mistletoe in Cancer: Promises and Challenges**
Channing Paller, MD, The Sidney Kimmel Comprehensive Cancer Center at Johns Hopkins
- 1:40 pm** **Targeting Oncogenic Transcription Factors for Cancer Therapy: The Potential of Natural Products**
David Frank, MD, PhD, Dana-Farber Cancer Institute
- 1:55 pm** **PRISM: Discovering Targeted Therapeutics for Cancer Using Mixtures of Barcoded Cancer Cell Lines**
Channing Yu, MD, PhD, Dana-Farber Cancer Institute
- 2:10 pm** **Systems Pharmacology: A Computational Platform for Screening TCM Herbals and a Personalized, OMICS-based Approach to CAM**
Sushing Chen, PhD, University of Florida
- 2:20 pm** **Discovery of Natural Product Sensitizers of TRAIL-induced Apoptosis in Renal Carcinoma Cells**
Curtis J. Henrich, PhD, Center for Cancer Research, NCI, NIH
- 2:30 pm** **Panel Discussion**

- 3:05 pm** **Break**
- 3:20 pm-4:35 pm** **CAM Therapeutic Interventions and Microbiome**
Moderator: Gabriela Riscuta, MD, Division of Cancer Prevention, NCI, NIH
- 3:20 pm** **Cancer as a Disease of the Metaorganism**
Giorgio Trinchieri, MD, Center for Cancer Research, NCI, NIH
- 3:35 pm** **Dysbiosis-associated Liver Tumorigenesis- A Model to Study the Effect of Synbiotic for Liver Cancer Prevention and Treatment**
Yvonne Wan, PhD, University of California, Davis Health Systems
- 3:50 pm** **The Microbiome and Colon Cancer**
Stephen J.D. O'Keefe, MD, MSc, University of Pittsburgh
- 4:05 pm** **Regulatory Considerations for Early Development of Live Biotherapeutic Products**
Cara Fiore, PhD, Food and Drug Administration
- 4:20 pm** **Panel Discussion**
- 4:35 pm** **Outline the Summary Report**
- 5:00 pm** **Adjourn Day 1**

Day 2
May 26th, Building 38A, LHA

- 8:00 am-10:15 am** **Vitamins and Other Nutritional and Pharmacological CAM Interventions**
Moderator: Paul Coates, PhD, Office of Dietary Supplements, Office of the Director, NIH
- 8:00 am-9:00 am** **Vitamin D**
- 8:00 am** **Vitamin D as a Treatment Option for Cancer; The Promise and the Challenges**
George Studzinski, MD, PhD, New Jersey Medical School
- 8:15 am** **Vitamin D and Follicular lymphoma**
Jonathan Friedberg, MD, University of Rochester Medical Center
- 8:30 am** **Association of Vitamin D Levels with Melanoma Patient Outcome**
Jeffrey Lee, MD, The University of Texas MD Anderson Cancer Center
- 8:45 am** **Panel Discussion**

8:55 am-10:15 am Vitamin C

- 8:55 am** **Connecting Vitamin C Pharmacokinetics Discoveries to Cancer Treatment**
Mark Levine, MD, National Institute of Diabetes and Digestive and Kidney Diseases, NIH
- 9:00 am** **Pharmacological Ascorbate Acid Trial (Pancreas)**
Joseph Cullen, MD, University of Iowa
- 9:15 am** **High Dose Parenteral Ascorbate Inhibited Pancreatic Cancer Growth and Metastasis: Mechanism and a Phase I/IIa Study**
Qi Chen, PhD, University of Kansas
- 9:25 am** **A Randomized Phase 2 Trial of Ascorbic Acid in Combination with Docetaxel in Men with Metastatic Castration Resistant Prostate Cancer (mCRPC)**
Channing Paller, MD, The Sidney Kimmel Comprehensive Cancer Center at Johns Hopkins
- 9:30 am** **Vitamin C as a Novel Targeted Therapy in KRAS/BRAF Mutant Solid Tumor Malignancies**
Manish Shah, MD, Weill Cornell Medical College
- 9:45 am** **Epigenetic Prevention of Cancer by Vitamin C**
Gaofeng Wang, PhD, University of Miami Miller School of Medicine
- 9:50 am** **Panel Discussion**
- 10:15 am** **Break**
- 10:30 am-12:15 pm** **International Collaborations**
Co-Moderators: Haidi Zhang, MD, PhD, Nanjing University, China and Mao Jun, MD, MSCE, Memorial Sloan Kettering Cancer Center
- 10:30 am** **NSFC Funding Profile on Cancer Research in the Field of Traditional Medicine**
Ruijuan Sun, PhD, National Natural Science Foundation of China
- 10:45 am** **Basic Mechanisms and Clinical Outcomes of Cancer Treatments through an Integrated Approach**
Anlong Xu, PhD, and Kaiwen Hu, MD, PhD, Beijing University of Chinese Medicine, China
- 11:10 am** **Translating the Power of Traditional Chinese Medicine into Patients' Hope: Screening for Magic Bullets from Medicinal Herbs to Tame Cancers**
Guang-Biao Zhou, MD, PhD, Chinese Academy of Sciences, China
- 11:25 am** **Network Pharmacology and Computation Modeling to Traditional Chinese Medicine Research**
Shao Li, MD, PhD, Tsinghua University, China

- 11:40 am** **Integrative Chinese Medicine for Late Stage and Elderly Lung Cancer Patient**
PingPing Li, MD, Peking University Cancer Hospital, China
- 11:55 am** **Panel Discussion**
- 12:15 pm** **Lunch**
- 1:15 pm-3:00 pm** **Precision Medicine, Biomarkers and Integrative Medicine Clinical Research**
Co-Moderators: Edward Chu, MD, University of Pittsburgh Cancer Institute and Alice Chen, MD, Office of the Director, DCTD, NCI, NIH
- 1:15 pm** **Another Approach to Personalized Medicine: N-of-1 Trials**
Ian Kronish, MD, MPH, FAHA, Columbia University Medical Center-via teleconference
- 1:25 pm** **NCI-MATCH Trial**
Kelly Kim, PhD, Cancer Diagnosis Program, DCTD, NCI, NIH
- 1:35 pm** **Master Protocol Design**
Alice Chen, MD, Office of the Director, DCTD, NCI, NIH
- 1:45 pm** **The Statistics of Phase 0 Trials Application to Cancer CAM Therapeutics**
Larry Rubinstein, PhD, Biometric Research Program, DCTD, NCI, NIH
- 2:00 pm** **Early-Phase Clinical Trials with PHY906**
Edward Chu, MD, University of Pittsburgh Cancer Institute
- 2:10 pm** **The Promise of Precision CAM Intervention Trials**
Jun Mao, MD, MSCE, Memorial Sloan Kettering Cancer Center
- 2:25 pm** **Integrative Approach during Cancer Treatment and Neuropathy Management**
Ting Bao, MD, Memorial Sloan Kettering Cancer Center
- 2:30 pm** **Strategies on Clinical Research of Chinese Herbal Medicine on Cancer**
Weidong Lu, MB, MPH, PhD, Dana-Farber Cancer Institute
- 2:35 pm** **Panel Discussion**
- 3:00 pm-3:45 pm** **Material Standardization and Drug-Herb Interaction**
Moderator: Weidong Lu, MB, MPH, PhD, Dana-Farber Cancer Institute
- 3:00 pm** **Drug and Herb Interactions**
Simon Yeung, PharmD, LAc, Memorial Sloan Kettering Cancer Center

- 3:10 pm** **Standardizing Snowflakes: How Do We Normalize Nature**
Craig Hopp, PhD, National Center for Complementary and Integrative Health, NIH
- 3:20 pm** **Botanical Drug Development and Quality Standards**
Sau Lee, PhD, Food and Drug Administration
- 3:30 pm** **Panel Discussion**
- 3:45-4:25 pm** **NCI Research Resources and Funding Mechanisms**
Moderator: Ting Bao, MD, Memorial Sloan Cancer Center
- 3:45 pm** **NCI Clinical Center**
Brigitte Widemann, MD, Center for Cancer Research, NCI, NIH
- 3:50 pm** **NCI Natural Product and Other Resources**
Dan Xi, PhD, Office of Cancer Complementary and Alternative Medicine, DCTD, NCI, NIH
- 3:55 pm** **NCI, NIH Grant Funding Mechanisms and Policies**
Dan Xi, PhD, Office of Cancer Complementary and Alternative Medicine, DCTD, NCI, NIH
William Timmer, PhD, Cancer Therapy Evaluation Program, DCTD, NCI, NIH
Syed Quadri, PhD, Center for Scientific Review, NIH
- 4:10 pm** **Panel Discussion**
- 4:25 pm** **Final Panel Summary**
- 5:00 pm** **Meeting Adjourns**