

❖ Name & Designation	: Dr. Satya Vati Rana, Professor.
❖ Address	: Dept. of Gastroenterology, PGIMER, Chandigarh-12.
❖ Name of the International Conference/ Seminar/Symposium/ Workshop	: Cancer Science Conference-2014.
❖ Title of the abstract accepted	: Imperative effect of wheatgrass on tumor marker and histology of experimentally induced colon cancer in rats.
❖ Date & Venue	: 20-22 nd October 2014. Chikago, USA.
❖ Money sanctioned	: Rs 1,00,000/-
❖ Money reimbursed	: Rs 99,626/-

Participation Report

More than 600 delegates attended the conference. Scientists from more than 32 countries presented orally their research work during the conference. They came in Chicago to view poster presentations, oral abstract presentations and presentations by invited speakers..

● Number of sessions:

The conference started on 20th October 2014 at 8.30a.m. Introduction was given by Prof Peter Weightman from University of Liverpool, UK and Dr Sudhakar Yakkanti from Centre for Cancer & Metabolism Cell Signaling Laboratory, Biosciences Division SRI International, USA. There was a Special Session of seven talks. Talk on Cancer on stem cell: A new paradigm shift in silibinin efficacy to control colorectal cancer was very informative. Following three sessions were running simultaneously on same day:

Session 1: Cancer Cell Biology, Diagnostic and Prognostic Cancer Biomarkers

Session 2: Organ Specific Cancers, Cancer Genetics, Drug Development and Diagnostics

Session 3: Tumor Markers

On 21st October 2014 also, the conference started at 8.3am with Keynote Forum which was delivered by Prof Jeffrey B Ulmer from Novartis Vaccines & Diagnostics, USA and DR Raza Hakkak from University of Arkansas for Medical Sciences, USA. On this day also, following 4 simultaneous sessions were conducted:

Session 1: Advances in Cancer Detection, imaging, Management & Prevention

Session 2: Tumor Science

Session 3: Novel approaches to Cancer Therapeutics

Session 4: Cancer Therapy and Clinical Cancer Research

On 22nd October 2014, the Conference started at 8 am and following 4 sessions were held at one place:

Session 1 Carcinogenesis and Mutagenesis and OMICS in Cancer Research.

Session 2 Anti-Cancer Drug Discovery and Development.

Session 3 Cancer and Tumor Immunobiology, Cancer Immunotherapy and Cell Therapy.

Session 4 Economic impact of cancer

• **Highlights of conference:** Topics for Special Session during the conference were:

- Clinical research on herbs and supplements for cancer: An integrative medicine perspective
- Cancer stem cell : A new paradigm shift in silibinin efficacy to control colorectal cancer
- Breast cancer prevention and treatment with oleanane triterpenoids
- Phytochemicals potently inhibit migration of metastatic triple negative breast cancer cells
- Glycemic restriction in cancer patients : A 7 –year, controlled interventional study

The scientific conference addressed many cutting-edge research areas which range from clinical to translational and basic aspects of Cancer Science and Therapy. Topics included Chemoprevention of gastrointestinal tract cancer with berries, modification of the epigenome by green tea polyphenols: Role in cancer prevention, Synthesis and anticancer screening studies of benzothiazole –based piperazine derivatives, The suppressive effect of organism senescence on cancers , Lung cancer screening by analysis of exhaled breath, Circulating cancer cells and their use in the real life, Design and synthesis of 8-hydroxyquinoline derivatives for the diagnosis and treatment of cancer, Tissue expression of glutathione S-transferase P1 and matrix metalloproteinase-9 in Egyptian patients with Barrett's esophagus and esophageal adenocarcinoma etc .

• **New things learnt:**

This conference provided a forum for research scientists like me and clinicians to work together in a multidisciplinary, interactive and supportive collaborative manner so as to generate new ideas and research applications to move this field forward. Invited speakers presented state-of-the-art research that focused on disease mechanisms, diagnosis, and treatment of disorders involving cancer science and therapy.

The conference was designed to provide a forum for the presentation, discussion and debate of translational and clinical research in the area of cancer so that physicians and health care professionals diagnosing and managing patients in this area are able to apply the latest evidence-based approaches to optimize effective patient outcomes.

I learnt that

- Silibinin significantly decreases cancer stem cells marker CD44 mRNA expression, Notch-mediated signaling, and protein levels of cleaved Notch and its transcriptional target Hes-1.
- I also learnt that herbs supplements, plus life style interventions such as exercise, biobehavioral and dietary therapies should be included into comprehensive treatments, such as chemotherapy for cancer patients
- Oral administration of strawberry powder (60g/day) to patients with esophageal dysplasia led to histological regression of approximate 80% of mildly dysplastic lesions and reduced levels of iNOS, COX-2, and phosphor-NF-kB-p65 proteins.
- Treatment of patients with black raspberries powder for an average of 3 weeks led to reduced cell proliferation and demethylation of suppressor genes in the Wnt signaling pathway.
- Treatment of patients with familial adenomatous polyposis with rectal black raspberries suppositories caused a 36% regression of rectal polyps

Participant's contribution to the conference

- Oral presentation of the research work entitled "*Imperative effect of wheat grass on tumor marker and histology of experimentally induced colon cancer in rats*" was done in tumor science Session on 20th October 2014 from 1.20 to 1.40 pm.
- Participated in the discussion of research work presented by scientists from other countries.
- Visited the posters and took part in discussion.
- Discussed our research work with various scientists from other countries.

I believe that this conference was an added bonus to my career. I would again like to thank the ICMR for providing me the financial support for attending this conference.