“The Cancer Genomic Atlas (TCGA) Project and Precision Medicine”

To be presented by

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Thursday, March 9, 2017

6:00 – 6:20 PM – Networking; Pizza/drink
6:20 – 8:45 PM – Program
8:45 – 8:55 PM – Door-prizes drawing; Networking

Online Registration site: http://www.asq509.org/ht/d/DoSurvey/i/35817

Open to Public –
$5: non-ASQ members to cover pizza/drink cost;
Free: ASQ members, veterans, senior citizens, past speakers, US PHS Commissioned Corp officers, teachers, students, interns, residents, postdocs, FDA Commissioner’s Fellows, MJ-DC members, NTUAADC members, CAPA members, NTMUADC members, CKUAADC members, NTHUAADC members, NJTUADC members, CCACC volunteers/employees, FAPAC members, CBA members, AAGEN members, NCARSQA members, OCA-DC members, AAMB members, ACAP members, DC Leaders Club members, BioTrain volunteers, and current job-seekers

Location: Kelly’s Deli Conference Center, 7529 Standish Place, Rockville (Derwood, for GPS users), MD 20855

Registration Deadline: Please register by Thursday noon, March 9, 2017.

Question: Please contact Dr. C.J. George Chang, Chair of Biomed/Biotech SIG, ASQ509; gchang2008@yahoo.com or 240-793-8425 (cell).

Driving directions: By Cars: From I-270 (N or S bound): Take Exit 9A and exit from the FIRST right exit; turn left (east) onto Shady Grove Dr.; turn right (south) onto Rockville Pike (Route 355); turn left (east) onto East Gude Dr.; turn left (north) immediately onto Crabbs Branch Dr.; turn left (west) immediately onto Standish Place. The first building on your right side is 7519 Standish Place; open parking. The venue is on the first floor of 7529 Building with its external entrance opposite to the left side of 7519 building main entrance. By Metro trains: Off from Red Line Shady Grove Station, and take RideOn Route 59 TOWARD ROCKVILLE and get off from "Calhoun Place" stop. Standish Place is next to the Bus stop. Our venue is within 2 min of walking distance from the stop.
Summary

The current achievements of high throughput biomedical technologies and high speed computation/bioinformatics make large-scaled studies of human genomics into the reality. To comprehensively and systematically investigate cancer genomic landscapes, the National Cancer Institute (NCI) and National Human Genome Research Institute (NHGRI) initiated collaborative efforts of The Cancer Genome Atlas (TCGA) project in 2005. This project has generated multi-dimensional maps of the key genomic changes in 33 cancer types. The data are collected from tumor tissues of more than 11,000 patients through high throughput technologies, which are publically available and have been used widely by the research community.

As a participant and co-leader of a sub-working group of TCGA project, Dr. Chen will highlight the important technologies and scientific achievements of TCGA project. Dr. Chen will explain how to translate the data from TCGA project to the clinical setting and benefit cancer patients through the recently initiated precision medicine project. Dr. Chen will review the concept of precision medicine, including the near-term and long-term goals, the workflow, and the clinical trial design of precision oncology. Dr. Chen will discuss how to apply the concept of precision oncology in the clinical practice of internal medicine, surgery, and laboratory medicine. Finally, Dr. Chen will discuss the future of precision oncology from the perspective of cancer patients and the human society.

Speaker’s Bio: Zhong Chen, MD, PhD

Dr. Zhong Chen received her medical degree from Beijing Medical University in 1983, and obtained a PhD degree in tumor immunology in 1988 from the Department of Microbiology and Immunology, University of Rochester, NY. She then continued her postdoctoral training in the same department and in the Department of Dermatology until 1994. Dr. Zhong Chen then joined the Tumor Biology Section, Head and Neck Surgery Branch at the National Institute on Deafness and Other Communication Disorders (NIDCD) of the National Institutes of Health (NIH). She was promoted to staff scientist in 2001, and was appointed as chief of the Clinical Genomics Unit in 2011.

Dr. Chen has been working at NIH for more than 20 years and her research traverses several diverse disciplines relating to translational oncology and genomics, including cell and molecular biology, gene expression and transcriptional regulation, high throughput sequencing, functional genomics, animal tumor models, preclinical and clinical investigation, and new drug testing. She has participated in several pre-clinical investigations and phase 0/I clinical trials testing novel anti-cancer therapies targeting PI3K, MEK, CK2, heat shock protein, EGFR, NF-κB, TRAIL, and Wee1 pathways.

Dr. Chen has published ~100 original papers and review articles in peer-reviewed journals, and has co mentored ~80 PhD and MD fellows and students. Recently, she has participated in The Cancer Genome Atlas (TCGA) of head and neck cancer and PanCan TCGA 12 projects, and served as a co-chair of PanCan Squamous Cell Carcinoma (SCC) working group.

This event is cosponsored by NTU Alumni Association DC Chapter (www.ntuaadc.org) and Chinese American Professional Association DC Chapter (www.capadc.org).