A word from the CTS Division Chair: Improving Clinical Translational Research. Can the Clinical Laboratories play a role?

The Clinical Translational Science Division will be involved in the following meetings and Symposia at the Annual 2014 AACC meeting in Chicago:

**Sunday, July 27th** from 1:00—2:30 pm is the Division Awards and Networking Meeting. This meeting is for members of all Divisions. It will be held at the Hyatt Regency Chicago.

**Sunday, July 27th** form 6:45 — 8:00 pm is the Annual AACC Meeting Opening Mixer, open to all attendees of the Annual Meeting. It will be held at the Hyatt Regency McCormick Place.

**Monday, July 28th**, from 5:30—7:00 pm will be the joint mixer including the Clinical Translational Science, Pediatric Maternal-Fetal, Industry and the LIS-Informatics Divisions. At this Social Mixer, the awards for abstracts and posters will be presented. This will be held at the Hyatt Regency Chicago.

**Tuesday, July 29th**, Noon—2:30 pm is the Annual Clinical Translational Science (CTS) Division Luncheon and Business Meeting. In addition to buffet lunch and business, there will be a presentation titled “Next Generation Tools for Better clinical Management of Patients”. The topics include: 1) "Opportunities and Challenges of High Sensitive Troponins in Clinical Practice", Hans-Juergen Loyda, Roche Diagnostics Corp, (Indianapolis, IN), 2) “Found in Translation, The Cardiac Biomarker ST2 from Discover to Clinical Adoption”, James Snider, Critical Diagnostics (San Diego, CA), and 3) “Addressing the challenges I Multiple Myeloma: Benefit of testing multiple Plasma Cell Biomarkers in monoclonal Gammopathies”. Debbie Boldt-Houle, The Binding Site, Inc. (San Diego, CA) It will be held at the Hyatt Regency Chicago.

CTS Sponsored Events, the following Short Courses and Symposia are developed in cooperation with the CTS Division: Sunday, July 27th: Short Course 191001, Advanced Applications of Molecular Diagnostics and Pharmacogenomics in Targeted Therapeutics—Part 1. **Monday, July 28th**: Short Course 72415, Biomarkers of Acute Kidney Injury. **Monday, July 28th**: Short Course 72222, Advantages and Challenges of Capillary Electrophoresis for Monoclonal Gammopathies Diagnosis, and **Wednesday, July 30th** Symposia 34104, The Changing Landscape of Tumor Markers.

Vincent Ricchiuti, PhD

The world of biomedical research has certainly changed in the past decade. Historically, researchers worked in labs or isolated research groups, with two goals in mind: getting grants, preferably from the National Institutes of Health (NIH), and publishing papers. When, and if one’s findings eventually made it to the bedside, or improved the health of the community, was someone else’s concern. With rare exception, research agendas and study designs were driven by the investigator or funding agency, with no involvement of Laboratory Medicine (Clinical Laboratories), community stakeholders, industry or patients. Today, that model is giving way to multidisciplinary, interdisciplinary, and transdisciplinary team science, often involving stakeholders, with the goal of expediting and translating findings to benefit patients and the public. The evolution of the Center for Clinical and Translational Science and Training (CCTST) at NIH parallels these changes in
research. Thus, the unprecedented progress of medical therapy over the last few decades is associated with the advancement of understanding of molecular mechanisms of human diseases. Laboratory medicine is an integral part of this effort, as it is not only instrumental in studies that are defining the molecular bases of various disorders, but also provides biomarkers that aid in the selection of treatment for individual patients. However, challenges are ahead of us in terms of integrating Laboratory Medicine and Clinical Translational Science due mainly to a lack of support and funding in some institutions which consider that patient care is the only thing that matters. The mission of the Clinical Translational Science (CTS) Division is to provide a forum for laboratory scientists, clinicians, researchers, and technology developers involved or interested in clinical translational research. Its purpose is to inform and educate the laboratory community about efforts involved in the rapid translation of basic knowledge into clinical practice and patient care. We see the influx of new technologies in Laboratory Medicine and Clinical Laboratories such as mass spectrometry applied to clinical applications for drugs of abuse, small molecules and proteins, micro-fluidic technologies and other advanced technologies. In my opinion, the clinical laboratories should be a real partner in Translational Medicine and Clinical Research. The focus of the CTS Division is to provide a platform of information to help figure out how to integrate Clinical Translational Science into Laboratory Medicine, in particular in the Clinical Laboratories through the following white paper task force: Pre-analytical factors: What is the best way to standardize sample collection and storage? In other words, how to build a state-of-the-art Biobanking facility within the Laboratory Medicine Department? Analytical factors: How can we improve the validation of new biomarkers or high complex assays, such as immunometric assays? In particular, how to define GLP versus CLIA validation protocols that fit a biomarker validation need in a Clinical Laboratory? Your expertise is welcome, and I hope you will join us to help build the white papers for the above task forces. Let me know! Vincent Ricchiuti, PhD, Chair, CTS Division

CTS DIVISION WINS AN AWARD AT THE DIVISION NETWORK MEETING

On Sunday, July 28th, 2013, the annual AACC Division Awards and Networking Meeting took place. At this meeting, the Clinical Translational Science Division won an award for “having advanced the profession this year”. Also recognized were the following divisions: Clinical & Diagnostic Immunology, Molecular Pathology, and Proteomics. In addition, it was noted that the Clinical Translational Science Division had met all the requirements of a provisional division and was in the process of being accepted as a permanent division.

REVIEW OF CLINICAL TRANSLATIONAL SCIENCE 2013 BUSINESS MEETING SYMPOSIA: NEXT GENERATION TOOLS FOR HIGH TO ULTRA SENSITIVE MEASUREMENTS

On Monday, July 29, 2013, at the Annual Clinical Translational Science Division Business Meetings, a presentation was given titled “Next Generation Tools for High to Ultra Sensitive Measurements”. The topics included: 1) “Clinical Utility of ultra Sensitive HIV and PSA Assays” by Alan Wu, University of California/San Francisco General Hospital (sponsored by Singulex, Alameda, CA), and 3) “Development of Multiplex Biomarker Assays in CSF for the diagnostics of Alzheimer’s disease” by Olusegun A. Mojiminiyi from Kuwait University. The title of the winning abstract was: “Receiver Operating Characteristics (ROC) Curve Analysis of a Novel Index for Coronary Heart Disease Risk Prediction and Diagnosis of the Metabolic Syndrome”. President Vincent Ricchiuti presented the award and a check for $500.00. A thoughtful discussion followed the presentations as the audience asked the panel questions and offered comments regarding their talks.

2012 CTS DIVISION ABSTRACT AWARD FOR OUTSTANDING RESEARCH IN TRANSLATIONAL MEDICINE

On Tuesday, July 17, 2012, the Clinical Translational Science Division presented the 3rd Annual Abstract Award for Outstanding Research in Translational Medicine. The ceremony took place during the Joint Mixer with the Molecular Pathology, Pediatric Maternal Fetal, Industry, and Clinical Translational Science Divisions. The award winner was Olusegun A. Mojiminiyi from Kuwait University. The title of the winning abstract was: “Receiver Operating Characteristics (ROC) Curve Analysis of a Novel Index for Coronary Heart Disease Risk Prediction and Diagnosis of the Metabolic Syndrome”. President Vincent Ricchiuti presented the award and a check for $500.00.
There will be a story about the Guided Poster Walk in the Tuesday, July 29, 2014 edition of the AACC annual meeting CLN daily news during the annual meeting in Chicago. The following is an interview by the AACC with Vincent Ricchiuti, Chair of the Clinical Translational Science Division. Vincent gave a history, methodology of selection of the posters, and personal opinion about the Guided Poster Tours in the interview below:

-How do we select the posters for the guided tour?
In brief, a committee composed of volunteer members from each Division selects the abstracts that they believe represent the best of each Division’s scientific specialty. For example, the CTS Division uses the abstracts that are submitted to the CTS Division for Best Abstract Award. The CTS Division receives about 50 abstracts per year. The best abstracts are selected according to the quality of the following criteria: science, study design, experimental approach and methods used, translational medicine relevance, and clarity. Each criteria is given a score from 1 to 5 (1=poor and 5=outstanding). A first round selection of abstracts is narrowed down to the six best abstracts with the highest average scores. A second round of selection leads to the best abstract out of the six initially selected abstracts. The author of the best abstract will receive an award for “CTS Best Abstract 2014” during a joint mixer on the evening of Monday, July 28, 2014. During the guided poster tour, the CTS leaders will discuss the posters from the six best abstracts, including the best award abstract.

-Tell me about your experience with the AACC guided poster tours.
The guided poster tours began as a pilot project last year, so both the AACC Division Chairs and the AACC Education Program teams are still working on optimizing the format. The concept is to review posters from abstracts that are considered relevant by Division experts. Note that the guided tour currently does not involve the presenter of the posters. This guided tour usually takes less than an hour and occurs when the poster presenter is not supposed to be at the poster. The schedule of the poster walks led by division experts on Tuesday and Wednesday at the AACC Annual Meeting are published in the Annual Meeting onsite program guide. Division leaders and attendee participants are asked to assemble outside the entrance to the poster session in the McCormick Convention Center about 10-15 minutes prior to their walk.

-Why are the guided poster tours valuable to the participants and/or the attendees?
I believe the guided tour is a unique opportunity to review and discuss among a peer group and colleagues the work accomplished by authors in a casual and collegial environment. A valuable aspect of the guided tour is that it also gives attendee participants opportunities to meet new colleagues, and promote the value of being part of the AACC. Finally, the audience can understand why the author’s work is of interest to Division, providing them with a clear take-home message that they can grasp in the few minutes that they will spend at the poster.

-What kinds of lessons/knowledge can people expect to take away from these?
I am convinced that by the end of a guided tour, the attendee participants may have learned as much from the Division leaders as they have from the attendees themselves, especially if the topic or methods used in the posters is new to the viewers. In addition, reviewing a poster provides excellent practice in explaining quickly and clearly why the poster’s project is important, and what the findings mean—in my opinion, a useful skill to apply when revising a speech or paper on the same topic.

-What can a first-time attendee of the annual meeting expect from a guided poster tour?
I consider that the guided tour for a new AACC member or new attendee is an opportunity to practice explaining a scientific paper while meeting AACC members, exchanging knowledge, and fostering new collaborations between AACC members.