Meeting Report

This article summarizes the three-day program of scientific presentation, panel discussions and interactive dialogue at the 2nd International Conference on Medical Imaging & Case Reports (MICR-2019) held at Crowne Plaza Boston - Newton, Boston, MA from 20 to 22 November 2019. MICR-2019 is organized by the United Scientific Group (USG), which is a nonprofit scientific organization with tax-exempt status under Section 501(c)(3) of the Internal Revenue Code of United States of America. USG is an expert-driven initiative led by the editor’s association that includes academicians, researchers, and senior scientists. Members of this association serve as the board of directors and are committed to work together and contribute their services to scientific community by organizing scientific meetings around the world and extending their expertise in publishing scientific journals.

The meeting has brought together doctors, academicians and scientists who use Medical Imaging technique in their research. It allowed interaction between basic and clinical scientists to help both in their respective fields. The conference provided a valuable networking opportunity and set the stage for sharing ideas and concepts. It provided a platform to students, young researchers/doctors, to interact with each other and with some of the eminent people in the field to discuss and share their ideas.

The organizing committee for MICR included Prof. Rajendra D. Badgaiyan, Long School of Medicine, University of Texas Health and South Texas Veterans Health Care System, San Antonio, TX, Dr. Boris Gramatikov, Johns Hopkins University, Baltimore MD, Dr. Mei-Hua Hall, Harvard Medical School, Boston, MA, Prof. Anna Yankovskaya, National Research Tomsk State University, Russia, Dr. Kenji Suzuki, Tokyo Institute of Technology, Tokyo, Japan. We thank the committee members for their constant support in organizing the conference. Following is a summary of the three-day event.

Day 1 (November 20, 2019): The conference began with opening remarks by Prof. Rajendra D. Badgaiyan from UT Health San Antonio, TX. It was followed by his keynote lecture on a novel neuroimaging technique which allows detection of acute changes in the brain neurochemistry in the live human brain. The session moved forward with lecture on recent progress in magnetic resonance imaging based neuroinformatics by Dr. Michael I. Miller, Johns Hopkins University, Baltimore, MD. Prof. Elliot K. Fishman of Johns Hopkins University, Baltimore, MD provided an insight on Cinematic Rendering (CR)-3D visualization method. Dr. George El Fakhri of Harvard Medical School, Boston, MA addressed the challenges and opportunities associated with multimodal imaging using PET, MR and CT. The following lecture by Dr. Hayit Greenspan of Tel-Aviv University, Israel discussed her research on deep learning, computer-aided detection and diagnostic tools, detection, segmentation and characterization of...
radiological images. In the following talk Dr. Justin Baker of Harvard Medical School, Boston, MA spoke about efforts to bridge complementary approaches through single-case experimental designs in individuals with severe mental illness including bipolar disorder and schizophrenia.

The post lunch session started with keynote lecture on functional neuroimaging of reward and aversion processing in patients with PTSD by Prof. Igor Elman of Cooper Medical School of Rowan University, Camden, NJ. The following oration on biophotonic technologies for advanced eye diagnostics was delivered by Dr. Boris Gramatikov of Johns Hopkins University, Baltimore, MD. The final keynote oration was delivered by Dr. Ronal Eisenberg of Harvard Medical School, Boston on ‘challenging’ conventional wisdom. The above keynote lectures were followed by workshop on Interventional Radiology presented by Dr. Vinicius Fornazari of Federal University of São Paulo, Brazil and Dr. Gloria Maria Martinez Salazar of Massachusetts General Hospital, Boston, MA. The workshop hosted another hands-on workshop on Point of Care Ultrasound organized by Dr. Hamid Shokoohi of Massachusetts General Hospital, Boston, MA.

Day 2 (November 21, 2019): Day 2 of the conference started with a keynote lecture and technical sessions on CAD & Machine Learning; Neuroradiology; Cardiac Imaging; Medical Imaging and Analysis. The conference hosted another hands-on workshop on Point of Care Ultrasound organized by Dr. Hamid Shokoohi of Massachusetts General Hospital, Boston, MA.

The day started with the keynote talk by Dr. Kenji Suzuki of Tokyo Institute of Technology, Tokyo, Japan, on the deep learning artificial intelligence (AI) in medical image processing and on computer-aided diagnosis. The conference moved forward to technical session on CAD and Machine Learning chaired by Dr. Tina Kapur of Brigham and Women’s Hospital, Boston, MA. Neuroradiology session was chaired by Dr. Robert L. Savoy of Massachusetts General Hospital, Boston, MA and Dr. Mei-Hua Hall of Harvard Medical School, Boston, MA. Cardiac Imaging Session was Chaired by Dr. Joshua I. Barzilay of Emory University School of Medicine, Atlanta, GA and Dr. Hamid Shokoohi, of Massachusetts General Hospital, Boston, MA. Last session of the day was on medical imaging and analysis. It was chaired by Dr. Andrea L. Gropman of Children’s National Medical Center, Washington DC and Dr. Gonzalo Vegas Sanchez-Ferrero of Harvard Medical School, Boston, MA.

Day 3 (November 22, 2019): Day 3 continued with technical sessions on Cancer Imaging and Nuclear Medicine; Diagnostic Imaging. Cancer Imaging and Nuclear Medicine session was chaired by Dr. Eva C. Gombos of Brigham and Women’s Hospital, Boston, MA and Dr. Rajendra Badagaiyan of UT Health, San Antonio, TX. The session on Diagnostic Imaging was chaired by Dr. Keith Strauss of University of Cincinnati School of Medicine, Cincinnati, OH and Dr. Rajendra Badagaiyan of UT Health, San Antonio, TX. The conference concluded at lunch time.

Poster/Virtual Presentations: MICR-2019 had an interactive poster session. It provided an opportunity to speakers who could not physically attend the meeting, to showcase their work as e-posters or present via skype.

Workshops: MICR 2019 organized two workshops one each on Day 1 and 2. The workshop organized on Day 1 was titled Interventional Radiology Experience: Interventional Radiology Hands on Simulator Workshop and was organized by Dr. Vinicius Fornazari of Federal University of São Paulo, Brazil and Dr. Gloria Maria Martinez Salazar of Massachusetts General Hospital, Boston, MA. The workshop on Day 2 was titled Advanced Point-of Care Ultrasound- A Trend in Medical Care: Ultrasound Applications in Emergency and Critical Care Hands-on Workshop. It was organized by Dr. Hamid Shokoohi of Massachusetts General Hospital, Boston, MA.

We thank the organizing committee members, keynote speakers, featured speakers, students and attendees for their participation and cooperation throughout the event. The United Scientific Group is honored to host such a successful gathering comprising of remarkable people in the field of Medical Imaging.

Conference Proceedings

Abstract of the work presented at the conference will be published in the Journal of Medical Imaging and Case Reports (MICR). MICR is an international peer-reviewed, open-access journal for publishing high-quality articles related to all areas of radiological technology, diagnostic imaging, methods and tools for image analysis. We encourage scientists to publish their original research, reviews, case reports, rapid communications, editorial comments, and letters to the editor on clinical and research aspects of all imaging modalities.