

2010 RAD-AID Conference

2010 RAD-AID Conference on International Radiology for Developing Countries, November 1, 2010, hosted by Johns Hopkins Hospital in Baltimore, MD.



The RAD-AID Conference of 2010 was held on November 1st at the Johns Hopkins University

School of Medicine. Following the model set by the first RAD-AID Conference of 2009, the meeting reconvened a multidisciplinary forum of nongovernmental organizations, academic medical centers, health care relief organizations, radiologists, clinical health care providers, businesses, technology engineers, and public health experts. Attended by about 75 participants from more than twenty institutions, the conference grew significantly from 2009 and showed presentations of international radiology projects including Africa, Middle East, China, India, and Haiti. Topics at the conference included economic development for medical imaging, technology innovation for global radiology, educational resources on radiology for residents and overseas health personnel, public health research, and clinical strategies for deploying vital radiology resources in the developing world.



The meeting began with a warm welcome from Dr. Jonathan Lewin, Chairman of Radiology at Johns Hopkins (shown upper right). [The design, goals and schedule of the conference were presented by Dr. Daniel Mollura, President and CEO of RAD-AID.](#) The first panel (photo at left), [Finance and Economic Strategies for Sustainable International Radiology](#), had the



theme of how global radiology in scarce resource regions can be economically and strategically sustainable. Speakers (left to right in the photo) were: Sarah Wiktorek of Aperian Global presenting on intercultural awareness and education for overseas



volunteers with details on Aperian's partnership with RAD-AID for education radiologists for international projects; Anna Starikovsky, Director of Health Care Economic Development at RAD-AID, presented on lessons of economic sustainability from RAD-AID's work in north India; Tom Drum of the Small Enterprise Assistance Fund presented on strategies for long term enterprise building in developing nations; Ezana Azene, Director of Research at RAD-AID, presented the principles and strategies of Radiology-Readiness.



The second panel, [Public Health in International Radiology](#), discussed the emerging bridge between medical imaging and public health approaches. Krit Pongpirul of the Bloomberg School of Public Health at



Johns Hopkins presented research review on vital public health issues connected to radiology such as maternal infant health which uses ultrasound, breast cancer screening using mammography and ultrasound, in addition to infectious disease monitoring such as chest radiography for tuberculosis diagnosis. Dr. Mahadevappa Mahesh (photo at left), Chief Physicist and Associate Professor of Radiology at Johns Hopkins, presented

on safety measures for radiology in developing and emerging health care systems. Dr. Mahesh detailed how the life-saving capability of modern imaging systems can be safely implemented for patient care with strategies for lowering radiation doses to maximize benefits.

The third panel (photo at right), **Clinical Models and Radiology Service Strategies**, featured a range of models for implementing radiology in the developing world, depending on epidemiological clinical needs, energy availability, infrastructure, personnel availability, educational resources and other important factors. Ezana Azene (at left in panel photo) presented the utility of the Radiology-Readiness tool for assessing and optimizing radiology in China and India. Kristen DeStigter (at right in panel photo), co-founder of Imaging the World (ITW), presented on ITW's ultrasound pilot in Uganda where portable ultrasound with ultrasound algorithms and compressed imaging can be deployed in peripheral rural regions of Africa. Ryan Sydnor (center in panel photo), Haiti Project Manager for RAD-AID, presented his Radiology-Readiness assessment of post-earthquake Haiti with plans for ongoing efforts to assist Haiti's reconstruction. Benjamin Johnson, medical student of University of California San Diego (UCSD) presented his work from Uganda in working on RAD-AID's Radiology-Readiness assessment of Ugandan health facilities in addition to his collaborative work on the ITW ultrasound project. By comparing experiences in China, India, Haiti and Uganda, the panel presented a unique range of international experience for collecting observations across a spectrum of development ranging from chronic shortages of health care in Africa to the acutely devastated infrastructure in Haiti, to the rapidly advancing health technology infrastructure in China, with mixtures of advanced and scarce health care in India. This diversity of models serves to advance radiology's contribution to a range of health care systems across the world.





The fourth panel, [International Education for Residents, Technologists, and Attendings for Global Service](#), focused on the important role of education for those serving abroad in scarce resource environments. The panel began with introductory remarks and moderation from Dr. Barry Goldberg, Director of Jefferson Ultrasound Research and Education Institute. A longstanding leader in international education, Dr. Goldberg moderated the panel to incorporate key issues emerging for radiology educators to address global radiology



shortages. Matthew Lungren, Director of Residency Project Development at RAD-AID, presented his research on residents' views of incorporating global radiology training into US radiology residency programs. Dr. Lungren also presented RAD-AID's work to implement learning management systems (LMS) which can be used for better supporting local personnel in new imaging facilities overseas. Dr. Nagi Khouri (photo at left), Director of Breast Imaging at Johns Hopkins Outpatient Center, presented work on international education for the Middle East with a range of program data for breast cancer screening in countries such as Egypt, Jordan, Saudi Arabia and others. Joining Dr. Khouri for a joint presentation on internet based educational methods was Rena Geckle, Manager of e-Learning Programs at

The Johns Hopkins University, who discussed the implementation strategies of Hopkins e-Radiology for online global education. Brad Short (photo second from right), Senior Director of Member Services at the American College of Radiology (ACR) presented on the ACR's programs for residents and the Haiti Relief Fund which will be sending a team to Haiti in early 2011. William Mayo-Smith (photo at right), President of the Radiological Society of North America (RSNA) Committee on International Relations and Education (CIRE) presented the RSNA's programs for international radiology scholarship, teaching and research. This panel delivered a comprehensive array of overseas teaching strategies including on-site lectures and rotations to internet-based approaches. The key theme was the importance of integrating online and on-site learning for heightened international consultation, collaboration and learning.



The fifth panel, **Technology for Radiology and Health Care in Developing Countries**, delivered presentations on technology innovations for advanced medical imaging in resource-scarce environments. Moderated by Dan Mollura, the panel first addressed the role of Picture Archiving and Communications Systems (PACS) in global health projects. RAD-AID demonstrated its cloud architecture system for PACS which is now available for overseas projects. Cary Kimble (photo at right), Director of Business Development at Project HOPE, presented on mobile health solutions. Brian Garra (photo at left), co-founder of Imaging the World (ITW), presented the image compression, data transmission, and reporting strategies used in the ITW ultrasound pilot in Uganda. RAD-AID's partner institution, Engineering World Health (EWH) was

represented by Justin Cooper (photo at bottom right) who presented EWH's goals and strategies for empowering and educating physicists and engineers to assist imaging projects. RAD-AID also presented data from its fast-growing facebook forum led by Jonathan Mazal, which is integrated with the organization's blog, twitter feeds, and web site for a range of information suited to web 2.0 architecture.

2011 promises to be an energetic year for global radiology with new projects gaining momentum. Themes and plans discussed in the concluding wrap-up session were:

1. Continue efforts to improve educational resources for overseas local personnel, radiology residents, and technologists.

2. Continue testing of mobile and portable outreach solutions across multiple modalities.

3. Expand the Radiology-Readiness program, shown to be useful in Africa, Haiti and Asia, through new program deployments.

4. Strengthen the bridge between public health and radiology through structured outcomes measurements and literature reviews.

5. Medical students, radiology residents and technologists have a unique opportunity for collaboration and learning via global service projects, which can be planned and expanded in 2011.

