



Chiharu Kubo
Kyushu University Hospital, Director
Japan



Shuji Shimizu
Kyushu University Hospital, TEMDEC, Director
Japan

Biography :

Dr. Shuji Shimizu, M.D. Ph.D. is surgeon, majoring in endoscopic surgery, which is sometimes called “keyhole operation” and is patient-friendly. But currently Dr Shimizu works more in the project of telemedicine which started between

Korea-Japan in 2002. This project is now wide-spread in Asia-Pacific regions and is extending into Europe and USA. Dr. Shimizu is Associate Professor of Department of Endoscopic Diagnostics and Therapeutics and Deputy Director of Telemedicine Development Center of Asia at Kyushu University, Fukuoka, Japan. Dr Shimizu is currently co-chairperson of medical working group of APAN, and an executive committee member of International Association of Surgeons, Gastroenterologists and Oncologists, serving as chairman of telemedicine to connect worldwide centers of continuous medical education.



Masao Tanaka
Kyushu University Hospital
Japan



Maki Sugimoto
Kobe University
Japan

Biography :

An associate professor at Kobe University and University of Tokyo.

Visiting Professor of Medical Informatics Research Center, Teikyo University Visiting lecturer of Department of Bioengineering, School of Engineering, the University of Tokyo Executive Advisor of Newton Graphics Inc.

FICS International College of Surgeons, Fellow ISS/SIC International Society of Surgery, Active member SAGES Society of American Gastrointestinal and Endoscopic Surgeons, International Member RANA Radiology Society of North America, member SMIT The Society for Medical Innovations and Technology, member

He has been developing open-source medical imaging softwares including OsiriX, medical information technology system, surgical navigation system, minimally invasive endoscopic surgery, surgical robot, and Bio-Texture Modeling technology by using a 3D printer and various kinds of resin materials that can reproduce bio-texture accurately.

Abstract :

The patient-first wireless future of medicine

Consumer technologies based on information technology have changed the way doctors work. For example, developed by physicians at UCLA and Geneva University, OsiriX transforms X-ray images into 3D digital modeling images. From the surgeon's viewpoint, it is very useful to be able to find hidden cancers by making organs transparent and rotating them in 3D. By bringing those images into the operating room on an iPad, they can use them to help guide their surgery.

What has changed our society has been wireless devices, but the future are digital medical wireless devices. We'll soon use our mobile devices to monitor our vital signs and chronic conditions.

We highlight several of the most important wireless devices in medicine's future, all helping to keep more of us out of hospital beds.



Naoki Nakashima
Kyushu University Hospital
Japan

Biography :

Naoki Nakashima MD PhD is an associate professor in the Medical Information Center / the chief of the international medical relations office in Kyushu University Hospital. He has been a specialist of diabetes mellitus for 20 years and simultaneously worked as a specialist of medical informatics for 10 years. He is a councilor member of Japanese Society of Diabetes Mellitus and the director of the scientific committee of Japan Association for Medical Informatics. He focuses on the disease management methodology to prevent lifestyle-related diseases and complications. He has organized the "Carna project" which aims to establish a Japanese model for disease management of diabetes mellitus from primary to tertiary prevention as a social system.

He is also a founding member of "Telemedical Development Center of Asia (TEMDEC)" in Kyushu University which promotes a broad band telemedical network in Asia Pacific area. TEMDEC is the most active institute for international telemedicine in Asia-Pacific area.



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Luiz Ary Messina

RUTE

Brazil

Biography :

Luiz Ary Messina has over 40 years experience in Computer Sciences, teaching, researching, developing and commercializing software. He has successfully secured funding for innovative Telehealth projects from the European Union together with state and municipal agencies, university hospitals, international research organizations, enterprises and city halls. He graduated as an electronic engineer from the University of Brasilia, holds a Masters Degree in Databases from the State University of Campinas Unicamp, São Paulo, and a Doctorate degree from the Technological University of Darmstadt, Germany, where he was assistant professor from 1982 to 1988. Dr. Messina has worked in Industrial Systems Automation for Siemens AG in Erlangen and in São Paulo. He has also run a company since 1993 and also served as a consultant to big enterprises and governmental institutions in various fields of ICT and organizational processes.

In 2005 Dr. Messina began developing and coordinating RUTE for the Brazilian Ministry of Science, Technology and Innovation, which is managed by RNP. Since his involvement with RUTE, he often speaks to audiences in Brazil, Latin America and the Caribbean, and around the world on the advancements and methodologies of RUTE, the Brazilian initiatives on eHealth, the relationships and the formation of public policies on eHealth in LAC, and on the importance of the model adopted in Brazil which is based on connecting universities, research institutions, and university and teaching hospitals to the National Research and Education Network RNP. Begin 2012 the Brazilian Health Ministry joined RNP Interministerial Steering Committee composed before by the Ministries of Education, Culture, and Science Technology and Innovation.

Abstract :

The Brazilian Telemedicine University Network RUTE and its eHealth relations with Regional Academic Networks

Dec, 2012

The Brazilian Telehealth initiative enables videoconferencing, diagnosis, second opinion, continuous and permanent education and web conferencing, by linking university and teaching hospitals via the Rede Nacional de Ensino e Pesquisa (RNP, www.rnp.br), Brazil's national research and education network. Three national projects operate under the Brazilian Telehealth Initiative: The Telemedicine University Network, RUTE (Rede Universitaria de Telemedicina www.rute.rnp.br), the Brazilian Health Open University www.unasus.org.br, and the National Telehealth Primary Care Program, Brazil Telehealth www.telessaudebrasil.org.br.

Of these three national projects, RUTE is an initiative from the Science, Technology and Innovation Ministry (MCTI) and the other two are Ministry of Health initiatives. Today, there are 61 eHealth Centers in 61 University and Teaching Hospitals. Since March 2012 28 new eHealth Centers are receiving connection and equipment and 50 new are under project approval. There are 48 Special Interest Groups in health specialties meeting virtually at least every month, 2 to 3 everyday, representing a total of 313 participating institutions. Together with the National Telehealth Primary Care Program and some State Health Departments, there are already 1,800 municipalities taking part in the national Telehealth initiative.

The Brazilian Telehealth initiative together with the national programs and initiatives from Mexico, Colombia, Peru, Uruguay, El Salvador, Costa Rica, Peru, Chile, Argentina, Guatemala, Chile, Venezuela and Ecuador are establishing regional protocols for public policies in Telehealth in Latin America. From the Portuguese speaking countries, led by the ePortuguese Group from the WHO, Mozambique and Angola are starting to participate.

Initial relationships with the Health Sciences Group from APAN started in 2009, headed by the University Hospital in Kyushu, including common videoconferences surgeries also in high definition. Next steps regard an expressive LA participation.



Kenjiro Yasuda
Kyoto Second Red Cross Hospital
Japan

Biography :

KENJIRO YASUDA, M.D.

Dr. Kenjiro Yasuda graduated from Kyoto Prefectural University of Medicine in Kyoto, Japan in 1978. He is working at Department of Gastroenterology, Kyoto Second Red Cross Hospital and he is Director of Dept. of Gastroenterology from 2000.

His special field is diagnostic and therapeutic endoscopy, especially in bilio-pancreatic systems, and he also has clinical and research interest in GI endoscopy. However, his biggest highlights and achievement are on the development and distribution of endoscopic ultrasonography (EUS). He has started clinical uses of EUS from the first development of this method in 1981 as a pioneer of EUS. Since then, he has worked for the improvement of EUS systems and wide spreading of clinical applications of EUS. He is an honorary member of ASGE and co-editor of "Endoscopy".

Now, he still enjoys diagnostic and therapeutic endoscopy, and gardening and aquarium.



Hilvano Serafin
UP Manila General Hospital
Philippines

Biography :

Serafin C. Hilvano, MD, FPCS, FACS, ASA(Hon), Professor of Surgery, University of the Philippines Manila, acknowledged pioneer in Endoscopic and Laparoscopic Surgery in the Philippines, founded the Philippine Association of Endoscopic Surgeons, member of the core group which formed the Endoscopic and Laparoscopic Surgeons of Asia, eventually becoming it's President in 2001. Formed the Asian Society of HepatoBiliaryPancreatic Surgery, together with Prof. Tadahiro Takada and Prof. Chen Guo Ker and organizing the 8th and final congress in 2005 before it became AHPBA. Accomplished setting up the IT infrastructure of the University of the Philippines Manila (UPM), while being Chair, UPM IT Council and it is for this reason that UPM was able to participate actively in the teleconferencing of the MWG of APAN, February, 2010, right in it's campus.



Chan-Sup Shim
Konkuk University
Korea

Biography :

Chan Sup Shim, MD, PhD, FASGE, AGAF

Dr. Chan Sup Shim has been a leading endoscopist in Korea since the late of 1980s and has contributed to the development of the field of endoscopy on the international or regional level. He is now in full activity as (1) Director, Digestive Disease Center, Konkuk University Medical Center, (2) President, Korean Society of Photodynamic Therapy, (3) Regular Member, National Academy of Medicine of Korea, (4) International editor for the official journal of European Society of Gastrointestinal Endoscopy, Editorial Board, (5) International Editor, International Advisory Board of Journal of Digestive Endoscopy, (6) Editorial Board, International Editorial Board of Visible Human Journal of Endoscopy (VHJOE), (7) Reviewer, American

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Society of Gastrointestinal Endoscopy, (8)

Editorial Board, Gut and Liver, (9) Senior Editorial Board, Clinical Endoscopy, (10) Fellowship, American Society for Gastrointestinal Endoscopy (FASGE), (11) American Gastroenterological Association Fellow (AGAF), (12) Honorary Membership Honorary Member, American Society of Gastrointestinal Endoscopy.

His significant scientific contribution to the field of editorship of international gastrointestinal endoscopic society were (1) International Editor of Official Journal of the American Society for Gastrointestinal Endoscopy from 1997 to 2003, and (2) New Media Board of Official Journal of the American Society for Gastrointestinal Endoscopy from 2004 to 2007.

Dr. Shim opened the new endoscopy center - Glocal Digestive Disease Center - and performed international workshop "The cutting edge of Endoscopic Ultrasonography (EUS), Contrast-Enhanced Ultrasonography (CEUS), and Ultrasonography (US)" for the celebration of opening of new endoscopy center on 9th~10th, July 2011. With the real-time transmission of live demonstration and keynote lecture from 7 countries to Glocal Digestive Disease Center in Konkuk University Medical Center via Academic Research Network.

On 14th~15th, July 2012, he also organized international teleconference "International Hub in Advanced Endoscopy -Bringing the Best in the World to You-". With the real-time transmission of live demonstration and keynote lecture from 9 countries (USA, Japan, Spain, Taiwan, India, Thailand, China, Malaysia, and France) to Glocal Digestive Disease Center in Konkuk University Medical Center via Academic Research Network.

His recent interesting fields are developing of new stents for GI malignancy, benign stricture, and stent's for pancreatic pseudocyst, cholangiocarcinoma, and GB cancer and also developing academic research network.

Abstract :

International gastrointestinal endoscopic teleconference with collaborating institutes using superfast broadband internet connections

Chan Sup Shim, MD¹, Tae Yoon Lee, MD¹, Young Koog Cheon, MD¹, Sun-Young Lee, MD¹, Sunyoung Han, PhD²

¹Digestive Disease Center, Konkuk University Medical Center, Konkuk University School of Medicine, Seoul, Korea

²Dept. of Computer Science & Engineering, Konkuk University, Seoul, Korea

Telemedicine using a high speed network is a convenient and efficient tool that allows gastrointestinal endoscopists to learn new knowledge and advanced skills from distant locations without any spatial limitations. In recent years, increasing attention has been given to telemedicine system using research and education network and digital video transport system (DVTS) due to its low cost and easy use. Since February 2010, our digestive disease center have performed fourteen regular Korea-Singapore-Japan (KSJ) international teleconferences covering pancreatobiliary researches and case reports with a total of 4 hospitals in Korea, Japan and Singapore every 2 months. We also established a regular gastrointestinal teleconference with 4 hospitals in Japan in September, 2011. The fourth gastrointestinal conference was held in August, 2012. In last year, our hospital held the first annual international workshop regarding the "Cutting edges in the practice of Endoscopic Ultrasonography, Contrast Enhanced Ultrasonography, and Abdominal Ultrasonography". On July 14th, 2012, we had the second international workshop with 300 audiences on "2012 international Hub in Advanced Endoscopy- Bringing the best in the world to you". Our workshop dealt with a variety of concerns on advanced gastrointestinal endoscopy. There was real-time transmission of live demonstration from 8 countries including USA, Thailand, Malaysia, Taiwan, Japan, China, Korea, and India using DVTS via academic network. The quality of transmitted video image and sound was generally good but there were several minor problems such as accident cut off, suboptimal sound and view, and some routing problem. We are trying to solve these problems though some remote discussion with collaborating hospitals for technical review. In the future, we plan to continue and expand the multichannel international broadcasting of the live demonstration and international congress through academic network.



Thawatchai Akaraviputh **Mahidol University** **Thailand**

Biography :

Dr. Thawatchai Akaraviputh,
Minimally Invasive Surgery Unit, Department of Surgery,
Faculty of Medicine Siriraj Hospital.

Dr. Thawatchai Akaraviputh is a lecturer of the Department of Surgery, Siriraj Hospital and an endo-laparoscopic surgeon. He received his undergraduate degree and surgical training from Mahidol University, Bangkok, Thailand. In 1999 he received Germany Academic Exchange Service (DAAD) Scholarship. He completed a postdoctoral fellowship in advanced surgical endoscopy and obtained “Doktors der Medizin” degree with Professor Nib Soehendra at University Hospital Eppendorf, Hamburg, Germany. He returned to Bangkok in 2002, where he continued his training in laparoscopic surgery and subsequently in robotic surgery. He was promoted to Associate Professor in 2008. He has many international publications in a variety of endoscopic and laparoscopic surgery.

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Binh Tran Giang **Viet Duc Hospital** **Vietnam**

Biography :

Dr TRAN BINH GIANG, M.D., Ph.D. graduated from Hanoi Medical University in 1985. After that he followed post-graduated study in France (hospital COCHIN, Universite Paris VI, 1990, Universite Nice-Antipolis1994), in Australia (North Sydney University 2000), in Singapore (Singapore General hospital 2002). His speciality is majoring in laparoscopic surgery. Dr Tran BINH GIANG is Associate Professor at Hanoi Medical University, Chief of Department of General surgery, Director of laparoscopic center and Deputy Director of Vietduc University hospital. Dr TRAN BINH GIANG is currently President of VAES (Vietnam association of endolaparoscopic surgeons) and Secretary General of VSS (Vietnam Society of Surgery). He is also member of Boad of Governor of ELSA (Endoscopic and laparoscopic surgeons of Asia) and Chairman of the Organizing Committee of 10th Meeting of ELSA in Hanoi (ELSA2010VIETNAM).

Abstract :

The Telemedicine Network Between Viet Duc Hospita and Province, S Hospital in VietNam

Tran Binh Giang MD, PhD.

Vietduc University hospital

HANOI, VIETNAM

Telemedicine is the application of state-of-the-art audio-video technology in healthcare, making medical expertise available to patients and medical staff regardless of the location of the medical experts.

Vietnam is a country with long distance, difficult to access between North to South, from mountainous area to center. There are high number of referrals to provincial and central level facilities because of lack of qualified medical expertise especially for emergency cases. There are also high mortality risk during transportation from lower to higher level hospitals. Vietduc hospital is a center of surgery in the highest level and referred hospital for severe surgical emergency.

From 2005-2010, Vietduc hospital was established a telemedicine system with 6 provincial hospital in the Northern region of Vietnam. The telemedicine control center at Vietduc hospital managing the network. Each hospital equipped with one telemedicine work station, one tele-training/auditorium, two tele-surgery/

operating room with camera and laparoscopy system. The system used the MEGA-WAN (SHDSL) to connect between each other. For international connection, we used the APAN-network with technical support from our colleague in Japan.

The telemedicine system between vietduc hospital and provincial hospital have objective to make expertise of specialists from Vietduc hospital available to lower level hospitals to improve quality of patients services at all levels of the healthcare system. It also strengthen the capacity of the medical staff through more frequent and more efficient training. The system improved organisation and quality of emergency care through telemedical examination, consultation, advice and monitoring. It is also improved and strengthen access to international expertise and make it available also to the provincial and even district level. reduce referrals and overload at central and provincial hospitals.

The telemedicine system were worked with good results. All satellite hospitals had been trained basically, directly and professionally by expertise from Vietduc hospital. With supports from Vietduc hospital, the surgeons in satellite hospitals can diagnose and operate for many severe surgical emergency such as: intra-cranien hematoma, hepatic traumatism... In all hospital, the number of patients need to be transported to Vietduc hospital has strongly decreased in some hospital from 16% in 2005 to 3% in 2010.



Don Salvacion

VMMC

Philippines

Biography :

Don Salvacion is an Ophthalmology resident currently on his second year training at the Veterans memorial Medical Center in Quezon City, Philippines. He took up his Bachelor in Science in Biology at the University of the Philippines in Manila. He then earned his Medical degree from the University of the East Ramon Magsaysay Memorial Medical Center. Aside from the daily consultations and surgeries, he also loves to play the guitar, read books, and try his hand out at different sports. Though he admits that finding time is also a challenge in itself.

Abstract :

Telementoring: Interhospital Education of Ophthalmology Residents from a Philippine Hospital for Veterans in Pediatric Eye Examination

The Veterans Memorial Medical Center (VMMC) in the Philippines is a tertiary hospital catering mostly to the geriatric age group, with consequently very few pediatric patients. Its Department of Ophthalmology rotates its eye residents to another hospital, the Philippine Children's Medical Center (PCMC), for exposure to pediatric ophthalmology cases.

Telementoring through PREGINET was employed to aid in earlier learning of residents to pediatric eye examination. The Pediatric Ophthalmology service of the PCMC conducted a lecture on the approach to a pediatric eye patient followed by demonstration of examination on live patients. Positive feedback was given both by the students in VMMC and the PCMC Pediatric Ophthalmology service, with high-quality real-time interaction being cited as the major factor in facilitating learning of concepts.

In the small group setting therefore, telementoring can be effective in transcending the problem of distance between mentors and students in learning about pediatric eye examination.

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Kenshi Yao
Fukuoka University
Japan

Biography :

Dr. Kenshi Yao, MD, PhD is now working in Fukuoka University Chkushi Hospital as Head and Clinical Professor of Department of Endoscopy. Dr. Yao is specialized in all gastrointestinal endoscopy. His life work is establishment of quantitative assessment of endoscopic imaging using advanced imaging techniques.

Currently, he is focusing on magnifying endoscopy technique and diagnosis in the stomach. He had been frequently invited to international seminar courses and live demonstrations. At the same time, he is developing e-learning system of endoscopic diagnosis which would be commonly available among international endoscopists.

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Abstract :

Introduction of e-learning system for endoscopic diagnosis of gastric cancer: an international multicenter trial: Global e-Endo Study Team (GEST)

Background: Gastric cancer is the second cause of cancer death in the world. Diagnosis of gastric cancer in its early stage is imperative in order to reduce the mortality. However, no standardized learning system has been established. In order to overcome this problem, we aimed to investigate the usefulness of e-learning system for detecting of early gastric cancer by conventional endoscopy.

Setting: an international randomized controlled multicenter study

Intervention: e-learning system on the Internet

We are going to invite numerous endoscopists from all over the world as participants to the study. In this short lecture, I would like to introduce our trial briefly and I would like to invite possible candidate endoscopists. This project is approved by Fukuoka University and granted by Central Institute of Fukuoka University. If someone is interested in participating to this project, please send an e-mail as follows:

Correspondence: Ms Asuka Mizushima

mizushima-asu@medical-rs.com

Project Manager, global e-endo study team (GEST)

Department of Molecular-Targeting Cancer Prevention,

Graduate School of Medical Science, Kyoto Prefectural University of Medicine



Joon-Soo Hahm
Hanyang University Hospital
Korea

Biography :

Dr. Joonsoo Hahm, M.D. Ph.D. is a physician and a gastroenterologist, majoring in endoscopy(Gastrointestinal) and pancreatobiliary diseases. Dr Hahm works for many Korean Society, he worked as a president of Korean Society of Pancreatobiliary Diseases and president of Korean Society of Gastrointestinal. He also works in the project of telemedicine which started between Korea-Japan in 2002. He is a pioneer in telemedicine in Korea and has been trying to expand the infrastructures in Korea. Dr. Hahm is Professor of Medicine and Director of Digestive Disease Center at Hanyang University, Seoul, Korea. Dr Hahm is currently Endoscopy and now a president of Korean Society of Gastroenterology and also serve as a director of Seongsan Center for Bioethics.



Young-Woo Kim

National Cancer Center

Korea

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Biography :

Dr. Young-Woo Kim graduated from Medical School of Seoul National University in 1988. He had been trained at the Department of Surgery of Seoul National University Hospital. And, he served as a flight surgeon, ROK Air force Captain, for three years for obligatory military service. From 1997 through 2002, he had been working for Ewha Womans University as a faculty. And, he was recruited to National Cancer Center, Korea at Sep. 2002. From 2006 through 2011, he had contributed as a Head of Center for Gastric Cancer. During that period he also served as a Chief of Gastric Branch, Research Institute, Chief of Clinical and Translation Research Division, and Head of Center for Cancer Detection and Prevention. Now he is only serving as a Chief of Gastric Branch, Research Institute. His main research field is gastric surgical oncology encompassing clinical trials, developing surgical techniques of laparoscopic surgery, robotic surgery, and open surgery, and various translational researches. He performed over 3,000 gastrectomies so far. Also he is interested in telemedicine and medical engineering for device development. He published over 160 original articles and several book chapters for Laparoscopic Gastrectomy, Textbook of Oncology, Textbook of Gastric Cancer in Korea.

Abstract :

Memories at the Beginning of the Activities about Advanced Research Network

Young-Woo Kim

Gastric Cancer Branch, National Cancer Center

Transmission of high quality video and audio is essential part of telemedicine, which enables standardization of medical techniques and healthcare beyond geographical borders. Since 2001, Dr. Shuji Shimizu has been pioneer for establishing a medical network using broad-banded research network infrastructure between Korea and Japan, and worldwide now! Digital Video Transport System (DVTS) was a main software tool for telemedicine. Asia Pacific Internet Infrastructure(APII) and Kyushu GigaPOP (QGPOP) (Japanese side), the Korea Advanced Research Network (Korean side), and the Korea-Japan Cable Network (international line) were playground for our group. And we were happy other networks worldwide have been widely open for collaborations. Starting from successful telesurgical conference, endoscopic mucosal resection, pathology conferences and various other medical fields were successfully demonstrated to show clear benefit of this medical network so far. This is still evolving to become a practical tool for worldwide telemedical communication in the near future. We ain't seen anything yet!!



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Motohiro Ishii

QT Net

Japan

Biography :

Mr. Motohiro Ishii graduated from Faculty of Engineering, School of Electrical and Electronic Engineering, Kyoto University, Japan and joined Kyushu Electric Power Co., Inc. in 1989. Ishii worked at an Internet Datacenter of Kyuden Infocom Co., Inc. (QIC) from 2003 to 2006 as a network engineer. Ishii was involved in Genkai/Hyeonhae Project, Asia-Pacific Advanced Network (APAN), and telemedicine engineering team in Kyushu Univ. Hospital. etc. Since 2006, Ishii has been working at Kyushu Telecommunication Network Co., Inc. (QTNNet) and in charge of building and maintaining the FTTH service system

Abstract :

Memories at the beginning of the activities

Our first telemedicine activity was performed between Kyushu Univ. Hospital and Hanyang Univ., as an event of "IT WEEK", that was one of the research project of Genkai / Hyeonhae Project in 2003. Now, number of telemedicine activities is over 300 totally, and it is still growing more and more. I will talk about the memories of early-day telemedicine events in Kyushu Univ. etc.



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Koji Okamura

Kyushu University

Japan

Biography :

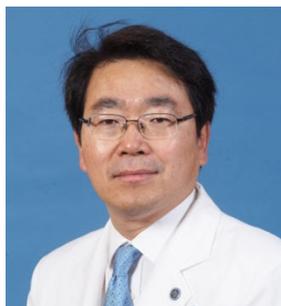
Prof. Koji OKAMURA graduated from Graduate School of Computer Science and Communication Engineering from Kyushu University, Japan in 1990.

After some carries at an company in Japan and Graduate School of Information Science, Nara Institute of Science and Technology, Japan and Computer Center, Kobe University, Japan as a Research Associate, he got Ph.D. Degree from Graduate School of Information Science and Electrical Engineering, Kyushu University, Japan in 1998. He worked as an Associate Professor of Computer Center and Graduate School of Information Science and Electrical Engineering, Kyushu University, Japan for 13 years. Since 2011, he has been a Professor of Kyushu University.

Abstract :

A History of IT Infrastructure

In this talk, a history of IT Infrastructure such as Network and Computer will be introduced. The speaker focuses on the relationship between technologies and applications with trend issue. Finally the item which can predict future applications will be explained.



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Ho-Seong Han

Seoul National University Bundang Hospital

Korea

Biography :

I have graduated from Seoul National University College of Medicine in 1984, and finished internship and residency of department of Surgery at Seoul National Hospital in 1989. I have worked as a assistant professor at Gyeong Sang National University Hospital from 1989 and become associate professor and the chairman of department of Surgery at Ewha Womans University Hospital from 1993 to 2003. The present position is the Professor and Chairman of department of surgery in Seoul National University Bundang Hospital. The field of interest is hepatobiliary surgery and laparoscopic surgery.

Telemedical activities are also keen interest and performing tele-conferences and tele live surgery for 10 years.

Abstract :

The telemedical activities for the past 10 years and plans for the next 10 years

Ho-Seong Han MD PhD

Seoul National University Bundang Hospital

The telemedical activity was started about 10 years ago between Korea and Japan, (2003) with the establishment of Hyunhae-Genkai network. At the first meeting, the network connection between two countries fascinated surgeon in two countries. The tele-conferences and tele live surgery was attempted and succeeded. One of great success was introduction of tele-live surgery in the international meeting. There was an international meeting of Asia Pacific Endoscopic & Laparoscopic Surgeon in Seoul, Tele-surgery performed in this conferences were wonderful and opened the door to the era of tele-live surgery. After the meeting, this surgery was also introduced to 1st Asia Pacific Hepatobiliary Conferences in Fukuoka. At this conference the full HD live surgery was demonstrated from Seoul to Fukuoka. From continuing success, tele-conferences and live surgery was spread to many international and domestic meeting.

APAN meeting is important international meeting where medical working group including doctors, engineers and supporters work together for this activities. These activities will enhance sharing knowledge among our groups and solidify our friendship as well. The tele-medical field will be one of important part of medical frontier.



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Dong-Wan Seo

Asan Medical Center

Korea

Biography :

Dong Wan Seo, M.D. & Ph.D.

Dr. Dong Wan Seo is one of the best endoscopists you can find in the Asian-Pacific region. His specialty is pancreatico-biliary endoscopy and EUS. He has created a lot of advanced endoscopy works to the World of GI Endoscopy including his own classification of cholangioscopic reading, EUS-guided treatment of pancreatic cystic tumors. His current position is a Professor of Department of Gastroenterology, University of Ulsan College of Medicine, Asan Medical Center which is the largest teaching hospital in South Korea. Dr. Seo is also serving as a chairperson of Endoscopy Teleconference Session in APAN meeting and scientific committee of SGI meeting. He is working as an active member in variety of national & international societies including KSGE, KSG, SGI, ASGE and NOSCAR. He is also serving as an international editorial board member of Gastrointestinal Endoscopy.



Young-Sung Lee

Chungbuk National University

Korea

Biography :

Young Sung Lee, M.D., Ph.D., has been leading MedRIC (Medical Research Information Center), a Ministry of Education, Science and Technology funded organization in S. Korea, focusing on research and development in medical informatics, medical data visualization, telematics, Virtual Reality-based medical training, and health communication and promotion policies and programs. Dr. Lee is Professor, College of Medicine, Chungbuk National University, and has a concurrent office as Director, Division of Cancer Epidemiology and Management, National Cancer Center, taking charge of cancer control policy and management at national level. He is also currently serving as a board member of the Korean Society of Medical Informatics. He was a visiting scholar at Stanford University Medical Media and Information Technology, and was a member of Committee on Infrastructure Technologies, National Science and Technology Council, the Nation's highest decision making body on science and technology policies under the President of Republic of Korea.

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Abstract :

Activities of Healthcare Session for the past 10 years

Yongsung Lee, Kilwon Kang, Byoung-Ki Koo, Younggyu Kim,
College of Medicine, Chungbuk National University, Cheongju, Korea

For the last 10 years healthcare sessions have dealt with the influence of IT on healthcare services in major areas: application of telemedicine to medical education; role of IT in the management of cancer diseases; operation of broadband research network on the whole medical care; public healthcare network for the effective delivery of medical information to patients as well as healthy persons. Sensational epidemic diseases such as AIDS and H1N1 were also handled. Urgent reaction against the diseases and strategies to educate and train health manpower against them were developed. Recently it provided a place for cancer and nano-technology research groups of various countries to introduce the application of IT to basic studies. As broadband network has increased exchange of research, education and training, and further on, expanded the cultural exchange in the aspect of human relationship, telemedicine is expected to become more and more important in healthcare.



Fumiaki Ikeno

Stanford University

USA

Biography :

Fumiaki Ikeno, MD is an interventional cardiologist and researcher for new cardiovascular therapy. He currently does research at Stanford University in USA, but originally from Japan. He serves as Secretary General of Complex Cardiovascular Therapeutics (CCT) which is the 3rd largest interventional cardiology live demonstration conference in the world annually held in Japan. Before he selected an interventional cardiology, he worked in the rural area in Japan as a family doctor. There, he recognized the importance of telemedicine. His dream is to establish the educational methods using telemedicine in the cardiovascular field.

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Abstract :

The possibility of the APAN network for the educational tool of interventional cardiology in the Asian Pacific countries

Fumiaki Ikeno, MD Division of Cardiovascular Medicine, Stanford University

The medical technology is advancing very rapidly in the 21st Century. The patients' treatment and prognosis are also improving thanks to these technologies advancement. In the cardiovascular intervention field, this advancement effect a lot to the patient care all over the world because the incidence of heart disease is increasing due to the diet and lifestyle change. In Asian Pacific region, the heart disease is also increasing due to the same reason that western countries are now experiencing. However, the infrastructure of health care in Asian countries are still not enough supplied in these emerging countries. My philosophy is that the advanced countries will help the emerging countries not only in economical matter but also medical field. My idea is to use APAN network for the education, information exchange and discussion in interventional cardiology field for the treatment of heart disease patients. Since 3 years ago, we have done POC (Proof of concept) study for the live transmission of procedure for patients treatment in Asian pacific region. I will show this experiences and future plan.



Sang-Gyun Kim
National Information Society Agency
Korea

Biography :

Mr. Sanggyun Kim is a principal researcher at Digital Infrastructure Division in NIA(National Information society Agency). His role is responsible for administration of KOREN NOC. He has recently been promoting technical supporting and coordinating KOREN users for collaborative research within domestic and international research and education network communities.

He was involved in many collaborative research projects including global demonstrations based several applications like medical and conferencing areas. He also participated in the international RnE network event as KOREN's representative.

Sanggyun has a master degree of Management Information System from Hankuk University of Foreign Studies as well as 9 years of experience in the RnE network research community.



Ti-Chuang Chiang
National Taiwan University
Taiwan

Biography :

Mr. Ti-Chuang Chiang, B.Sc. is Senior Technician, majoring in Medical Physic. He took 21 years to serve at Department of Radiotherapy, National Taiwan University Hospital. 9 years ago, he transfers to Division of Medical Informatics, College of Medicine, NTU. Education Technology became his major interesting. There are many medical distant learning and Telemedicine's project at NTU was supported with his IT skill. Mr. Chiang is currently at International Medical Physics Certification Board, serving as Secretary/Treasurer to assist the international medical community in achieving both performance excellence and contributions to health care.



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Minh Duc Cao

VINAREN

Vietnam

Biography :

Cao Duc Minh is a computer engineer, currently working in Vietnam research and education network centre which was established in 2007. His main job is network management, manage and support member's activities. With experience in the field of audio-visual, he is currently involved in organizing of telemedicine in Vietnam, under the role as a member of medical working group of APAN. He is also an IT engineer at Vietnam National *Agency* for Science and Technology Information, working as a computer systems manager, organizing activities in science and technology.

Abstract :

Digital Video Transport System (DVTS)

-the most favourite system for Telemedicine

For ten years, the DVTS has been well accepted in the medical community for telemedicine activities, especially, in Asia. Based on our experiences, we point out the advantages and disadvantages of this system to help doctors and technicians answer the question "Can DVTS remain the main stream?". DVTS is definitely the cheapest of all telemedicine systems. Software is freely downloadable and the system supports multi devices. This system is easy to handle, portable, and highly compatible with audio and video devices. Considering the disadvantages, the DVTS system consumes over 30 Mbps network bandwidth for the highest quality. As this system does not come with either an echo-canceller system or a quality of service (QoS) system, the local engineers need some experience to run it properly. Despite the fact that there are still some disadvantages, the next generation of DVTS with new features like interface such as USB interconnected HD cameras, SDI based interface, tablet is expected to better/fully satisfy all user needs.



Werner Van Huffel

Polycom Australia Pty Ltd

Australia

Biography :

Van Huffel, Werner

Director, AP&C Healthcare Industry Solution

Van Huffer has twenty plus years in the healthcare information technology industry across many businesses in Asia Pacific, including Microsoft and IBM, in roles ranging from programming, project management, architecture and strategy through to education, training, solution design, business development and management. At Polycom, Van is responsible for the healthcare business across the AP&C region, developing industry sales strategies to increase collaboration in the sector, supporting and assisting with marketing campaigns, providing thought leadership and speaking on behalf of Polycom on healthcare topics impacted by the use of UC solutions.



Hiroshige Kusumoto
Vidyo, Inc.
Japan

Biography :

Hiroshige Kusumoto joined Vidyo in May, 2008 and is country manager of Japan. Prior to Vidyo, Hiroshige was president of a US export company to the Ministry of Defense in Japan and country manager for Tandberg Japan. Prior Tandberg, Hiroshige was employed by KDDI, a leading global carrier in Japan. Hiroshige received a BA in Economics from Aoyama Gakuin University in Japan and studied at Master's Degree program in Public Administration from George Washington University in the US.

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Nobuhiro Torata
Kyushu University Hospital
Japan

Biography :

Mr. Torata is a staff of department of surgery 1 at Kyushu University Hospital and work as medical engineer at operation theater / surgical ward. He was previously involved in the telemedicine activity since middle of 2006, APAN Singapore and obtained the approval for the appointment as a member of TEMDEC which established for these activities in 2008. He too, coordinate Local setup part (Audio and Visual) with other engineers.

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Chakaphan Sookcharoen
Chulalongkorn University
Thailand

Biography :

Current position is Senior Network Engineer. Information Technology Center, Faculty of Medicine, Chulalongkorn University, Bangkok, Thailand. Responsible for network system of the faculty. The network 10 Gbps. Ethernet backbone connecting more than 5000 nodes scattered around more than 50 buildings in the campus. He takes care of 3 well equipped Teleconference rooms and all telemedicine activities of the campus and country.



Bani Lara
Advanced Science and Technology Institute
Philippines

Biography :

Bani Lara, a science research specialist at the Advanced Science and Technology Institute (ASTI), leads the network operations group of the Philippine Research, Education and Government Information Network. He has nine years of experience in working on Internet routing, IPv6 and multicast technologies in research networking. He also takes care of the routing infrastructure of the Philippine Open Internet Exchange (PhOpenIX).

He earned his degree in Computer Science at the University of the Philippines, Los Banos.



Ungarala Satyanarayana
Asian Institute of Gastroenterology
India

Biography :

Mr Satyanarayana U, a Post Graduate in Business Management from Indira Gandhi University, Andhra Pradesh, India. Working with Asian Institute of Gastroenterology since 1989 and taking care of all administrative activities related to Patient Care Services. Though he is not a technically qualified person, by observing his keen interests in Telemedicine technology, the management of Asian Institute of Gastroenterology made him responsible in organizing around 30 National and 15 International Live G I Workshops.



Bao Congxiao
Tsinghua University
China

Biography :

Congxiao Bao is an Associate Professor in Tsinghua University, working for China Education and Research Network. Her research interests include networking architecture, multicast and network video applications. Since 2005, she is active in global collaboration of telemedicine in China to promote the activities both as an ISP and end-users.



Takeshi Naitoh

Tohoku University Hospital

Japan

Biography :

I graduated from Tohoku University, School of Medicine in 1990. After completing residency in the First Department of Surgery, Tohoku University, School of Medicine, I visited the Minimally Invasive Surgery Center, Cleveland Clinic Foundation in 1995 as a research fellow. I spent my most time in clinical cases and animal research regarding endoscopic surgery. After finishing my fellowship, I came back to Japan, and I have been doing mostly colorectal cancer surgery, bariatric surgery and biliary surgery laparoscopically.

Abstract :

Establishing the teleconference system in Tohoku University Hospital

Takeshi Naitoh, Dai Sato, Chikashi Shibata, Koh Miura, Yu Katayose, Michiaki Unno

Department of Surgery, Tohoku University Hospital

Medical IT center, Tohoku University Hospital

Tohoku University Hospital is in Sendai city, which is in northern part of main island of Japan. Our hospital has over 1000 beds and we have over 7000 surgical cases a year. Our department which is Department of Surgery, Division of Hepato-Biliary-Pancreatic Surgery is focusing mostly on the hepato-biliary and pancreatic cancer, and Division of Gastrointestinal Surgery is managing the gastric cancer, colorectal cancer, bariatric surgery and inflammatory bowel disease. Our city had terrible damage by the earthquake and Tsunami on March 11 last year. We greatly appreciate kind support from all over the world. We are now trying to establish the teleconference system, which helps to communicate with affiliated hospitals in the stricken area.



Jiri Navratil

CESNET

Czech

Biography :

Dr. Navratil received his PhD in Computer Science from Czech Technical University at Prague in 1984 for his work on analysis of timesharing systems. He worked for 30 years at Computing and Information Center of CTU in different positions linked with High Performance Computing a Communications. During his several sabbatical leaves he worked for CERN Geneva, Switzerland, KEK Tsukuba Japan, and SLAC Menlo Park, California in the field of automatic control. After 2000 he moved into field of networking focusing on traffic monitoring. Since 2006 he works for CESNET in the group supporting special types of applications in different fields. CESNET is networking organization which connects all academic institutions in the country. High speed networks with 10Gbps backbone open wide area for mutual cooperation in national or international level. In last few years he is also focused on multimedia applications in medical field.

Abstract :

The actual problems of live demo surgeries

Jiri Navratil, CESNET.

The popularity of live demo surgeries on professional conferences is growing and it brings new challenges. CESNET collaborates with several leading hospitals and clinic in the country (Czech Republic) helping them to enter into the world of telemedicine, preparing together with them special videoconferencing sessions and on-line video transmissions of interesting surgeries. Current medical students have grown up with computers and they expect that modern technology will appear in all phases of their professional life. The interesting examples and experiences from telemedicine events in 2012 will be discussed.

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Sinethemba Mandyoli

University of Cape Town

South Africa

Biography :

I am a 31 years, African Computer engineer who is working for the University of Cape Town in South Africa. I am more of an Information Technology Administrator (Computer Engineer), and my area of focus is on eLearning, Videoconferencing and Web conferencing in general. I have been working closely with the Kyushu medical University of Japan to ensure that High quality video transmission is achieved in Africa at a low cost for the past two years.

Abstract :

A collaborative high resolution tele-education project:

Lessons learned from implementing –

Sinethemba Mandyoli, Gregory Doyle, Prof SR Thomson, Dr N Hartman

Background: South Africa is a middle income developing country with few tertiary centers performing advanced flexible endoscopic techniques required for the modern practice of gastroenterology. National and international opportunities for exposure to advanced training in new techniques need to be developed. High definition video conferencing is an e-learning solution we have been developing as a collaborative project for such purposes.

Methods: Conventional video conferencing is inadequate due to the high definition which is needed for the real time transmission of high quality endoscopic images. DVTS software is part of a system developed at Kyushu University in Japan at the time of the soccer 2002 world cup. It requires guaranteed high bandwidth but works with simple laptop transmission from a variety of different digital sources. Increasing bandwidth via the national university academic internet (SAREN) has made such transmissions feasible. We embarked on a collaborative project to establish a reliable link using this technology.

Outcome: The processes, difficulties and successes experienced in the introduction of this technology to the Faculty of Health Sciences at the University of Cape Town using a bottom up, minimum budget approach is detailed. This culminated in live transmission of endoscopic surgery from Japan to the Medical Faculty and to the current development of a dedicated transmission area in the gastroenterology clinic unit. This facility will be used to develop links with the Red Cross surgical training laboratory and the Universities of the Witwatersand & KZN.

Conclusion: This e-learning project shows that an innovative teaching initiative can be successfully piloted by an IT unit which focuses on teaching and learning. Its incorporation as part of a permanent physical e-learning hub merits serious consideration.



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Cavit Avci

Istanbul University

Turkey

Biography :

Dr Cavit Avci graduated from İstanbul University Faculty of Medicine in 1968, and finished his residency from the Department of Surgery in 1974. He became an Associate Professor in 1980 and a Professor Titular in 1988 from the Department of Surgery of Istanbul Medical Faculty. He worked in Paris at the V. University Hospital, Department of General Surgery and Research from 1977 to 1979. He is a Foreign Professor in Paris VI. Medical Faculty, (Ecole de Chirurgie) Surgery, Microsurgery Program since 1986.

He is a leader of videoscopic surgery in Turkey. After learning videoscopic surgery at its beginning, in

France, in 1988-89 and obtain a Laparoscopic Surgery Diploma in Paris XI's Medical University he has returned to Turkey, and started in 2000, for the first time in Turkey, laparoscopic surgery in the Department of Surgery of Istanbul's Medical Faculty.

The Telemedicine, The Education at distance and The Continuous Medical Education takes a great place in Dr. Avci's life. He also has interest in telesurgery and performed many tele-live surgeries and many activities of surgical education at distance. He proposed a tele educational Project to MMESA (Mediterranean and Middle Eastern Endoscopic Surgical Association - 36 Countries) in which he was the founder member and President in 2009 and 2010. Dr. Avci has created in 2010 a "Webtelesurgery Platform", an online free platform for training, education, communication of surgery, based on a low-bandwidth system Its main objective is the editing and the dissemination of medico-surgical knowledge in collaboration with some centers of Excellence in Europe and other countries. 18 Courses are organised per year, European School of Laparoscopic Surgery at St Pierre University-Brussels retransmit regularly by this platform for 2 years now. Dr Avci is a member (Then administrative member in 2013) of European Society of Telemedicine And e_Health (ESTeH) and will later be in collaboration with "Asia-Pasifique Telemedicine Group and TEMDEC".

Abstract :

Telemedicine in Turkey - Experiences and Projects of Istanbul University

C.Avcı1, L.Avtan2, G.B.Cadière3, L. Lareng4

¹*Istanbul Universitesi, İst.Tıp Fakültesi, Cerrahi Monoblok, İSTEM Merkezi, 34390 Çapa, İstanbul, Turkey*

²*Istanbul Tıp Fakültesi, Genel Cerrahi, 34390 Çapa, İstanbul, Turkey*

³*Dpt of Gastrointestinal Surgery, Saint-Pierre University, 322 Rue Haute, B-1000, Brussels, Belgium*

⁴*European society of Telemedecine and Ehealth F-31200 Toulouse France*

Istanbul University is the oldest and the most well known educational institution in Turkey. It has started its activities of Telemedicine in 2000 using the "radio-link" first, then the "ISDN" teleconferencing system and finally the internet.

Istanbul University, Continuing Medical Education and Research Center (ISTEM), in collaboration with the Turkish Association of Endoscopic Laparoscopic Surgery (E.L.C.D.) has created an online free platform for tele-education (Webtelesurgery.com). The main objective is to edit and spread the medico-surgical knowledge, in collaboration with the European Telemedicine Society (ETSeH) and the major Scientific Associations and Centers of Excellence in Europe like the European School of Laparoscopic Surgery in the University of Brussels.

Using "Webtelesurgery Platform" we want to establish a partnership with MMESA for distant learning of videoscopic surgery. MMESA (Mediterranean and Middle Eastern Endoscopic Surgery Association) regroups 36 countries.

The Broadband Telemedical Network, based on internet protocol in the Asia-Pacific Region, is very interesting and a great model for us. We want to learn a lot from their experiences they have earned in many years and would like to engage a collaboration with them.



Rungsun Rerknimitr
Chulalongkorn University
Thailand

Biography :

Rungsun Rerknimitr,MD

Professor of Medicine

President of GI Endoscopy Excellence Center, Department Medicine, Chulalongkorn University

Rungsun Rerknimitr graduated from Chulalongkorn University with honor. He obtained his American Board

of Internal Medicine from Rush Medical College, Chicago in 1996. Later, he pursued his Gastroenterology fellowship from Louisiana State University in New Orleans. Before he returned to Thailand, he obtained ERCP fellowship from Indiana University. He is currently a general secretary of GI Endoscopy Excellence Center at Chulalongkorn University, Bangkok Thailand. His current academic position is a Professor of Medicine. He is also a founding member of the Thai Association of Gastrointestinal Endoscopy and also a past chief editor of the *Thai Journal of Gastroenterology*. His main endoscopic interest is therapeutic ERCP with a special interest in metallic stent clinical application.

Abstract :

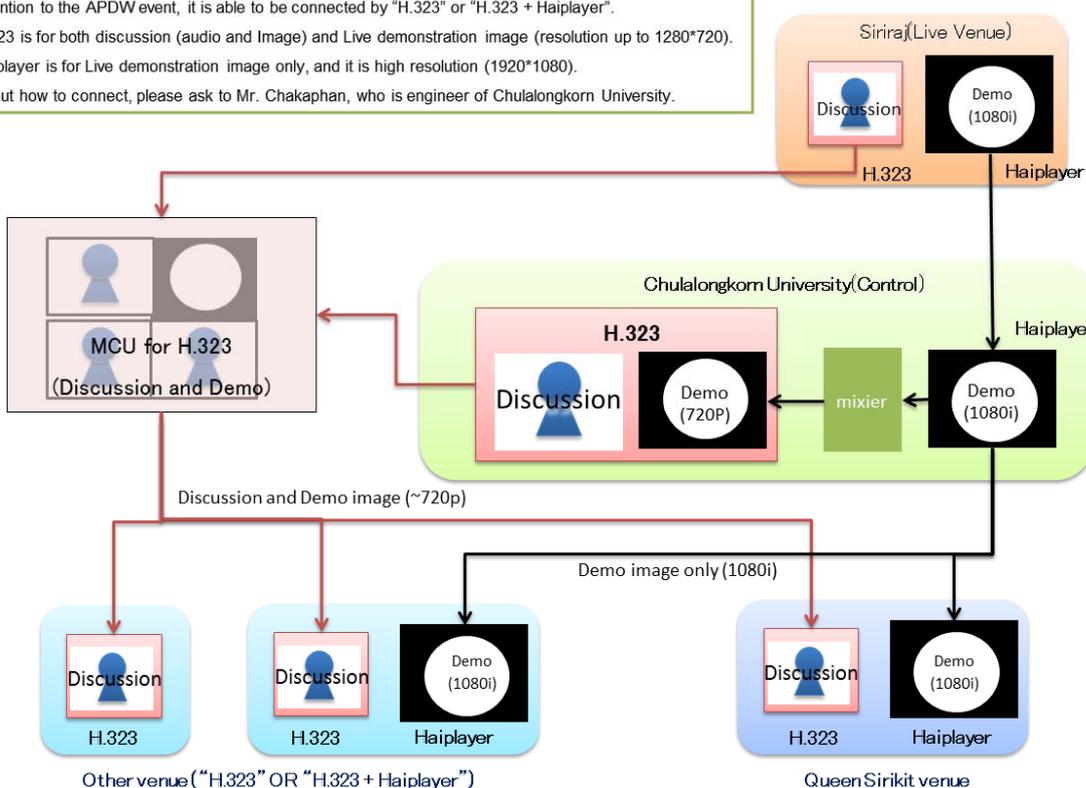
Live Endoscopy Demonstration and Transmission during APDW 2012

The Asian Pacific Digestive Week (APDW) is an annual scientific meeting organized by four professional medical non-profit organizations, namely, the Asian Pacific Association of Gastroenterology (APAGE), the Asian Pacific Society of Digestive Endoscopy (APSEDE), the Asian Pacific Association for the Study of the Liver (APASL), and the International Society for Digestive Surgery-Asian Pacific Section (ISDS) in collaboration with the member societies. These societies have common interest in diseases of the digestive system, including the esophagus, stomach, liver, gallbladder, pancreas, intestine and bowel. In APDW 2012, Thailand has been appointed as the host for this prestigious meeting. In the endoscopy section, there will be 2-day live endoscopy demonstration that will be separated into 4 sessions and sessions will be assigned for upper endoscopy, lower endoscopy and enteroscopy , ERCP, and EUS. The 40 guest endoscopists are world-renowned champions from around the world and from the Asia Pacific. The cases will be broadcasted from two medical campuses in Bangkok, Thailand; Siriraj Hospital and the King Chulalongkorn Memorial hospital to the venue Queen Sirikit National Convention Center.

We plan to use two systems for audiovisual connection; H.323 and Haiplayer. H.323 (resolution=1281*720) will be used for a 2-way communication among the two campuses, the venue, and the invited remote endoscopy center whereas Haiplayer with its higher resolution at 1920*1080 will be the mainstream for visual viewing only for all audiences.

All invited remote center will be rotated during each 4 sessions. The audiences at the main venue and remote site will have experience in case discussion directly to the moderators and to the guest endoscopists.

Attention to the APDW event, it is able to be connected by "H.323" or "H.323 + Haiplayer".
 H.323 is for both discussion (audio and Image) and Live demonstration image (resolution up to 1280*720).
 Haiplayer is for Live demonstration image only, and it is high resolution (1920*1080).
 About how to connect, please ask to Mr. Chakaphan, who is engineer of Chulalongkorn University.





Keiko Tsuchiya
Vidyo, Inc.
Japan

Biography :

Sales Engineer of Vidyo Japan. I have been worked in Vidyo for two years and providing technical consultation and support to customers about configuration and utilization of system from the designing phase to the deployment phase. Before joined Vidyo, I was responsible for software development for four years, and product planning and support regarding video communication service for three years.

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Christopher Khor
National University Hospital
Singapore

Biography :

Senior Consultant
Department of Gastroenterology & Hepatology
National University Hospital
Singapore

Dr Christopher Khor completed clinical fellowships in ERCP and in EUS in the US. More recently, he trained in Endoscopic Submucosal Dissection at the National Cancer Center Hospital , and at Kobe University Medical Center. His main practice areas are in general gastroenterology, therapeutic endoscopy and pancreato-biliary disease. He has a keen interest in endoscopic quality and education, and in promoting cross-border co-operation between regional endoscopists. Dr Khor was Vice-President of Asian-Pacific Digestive Week 2011 in Singapore, for which he directed Endoscopy programming. He is the immediate past President of the Gastroenterological Society of Singapore.



Shiaw Hooi Ho
University of Malaya
Malaysia

Biography :

Dr. Shiaw-Hooi Ho is a Senior Lecturer in the Department of Medicine, University of Malaya. Dr. Ho graduated from University of Science in Malaysia and obtained a Master's Degree in Internal Medicine from University of Malaya. He is currently working in the Gastroenterology and Hepatology Unit under Professor Dr. K.L. Goh in University of Malaya Medical Centre (UMMC). Dr. Ho has a keen interest in GI therapeutic endoscopy, image-enhanced endoscopy and pancreato-biliary endoscopy. Following his attachment in the National Center for Global Health and Medicine in 2010 (JSGE Research Fellowship Award), he began to promote the use of image-enhanced endoscopy and endoscopic submucosal dissection both in the detection and management of early GI neoplasia in UMMC. He is also one of the key coordinators in setting up telemedicine in UMMC which has been actively participating in teleconferences organized by the APAN medical working group over the last few years.



Nguyen Thuy Vinh

E Hospital

Vietnam

Biography :

Nguyen Thuy Vinh is Vice director of E Central Hospital, Hanoi, Vietnam.

She is President of Vietnamese Federation for Digestive Endoscopy (VFDE), and Permanent Member of the Vietnam Association of Gastroenterology committee.

Dr Vinh earned her medical degree (graduating with distinction) from the Odessa Medical College, the former Soviet Union, in 1986; she subsequently trained in internal medicine and gastroenterology. She earned her master of medicine degree from the University of Sydney, Sydney, Australia, in 1998, and her PhD from the Military Medical Institute, Hanoi, Vietnam, in 2004.

Dr Vinh's research interests encompass *H pylori* infection and related disease, the impact of antibiotic resistance on *H pylori* eradication therapy, functional gastrointestinal disorders and magnifying chromoendoscopy. Her extensive work on these topics has been published in numerous local and international journals.

Abstract :

Training Plan For Young Endoscopists in Digestive Center, E Central Hospital, Hanoi, Vietnam

E Central Hospital is a General Hospital with grade I, belongs to Ministry of Health, located in Hanoi, Vietnam. Digestive Center of E hospital is newly established center, invested by the Vietnamese government. For the development of the center, staff education and qualification are the most important issues that the leadership of the hospital always paid the attention to. Local and overseas training is planned for young doctors. Different areas of training are needed: hospital management, nursing education, informative technology, high technique endoscopic procedures, angiographic GI intervention.... The demands are very high but the finance funding is limited. There is little opportunity for young doctor to study in foreign countries in a big training center with modern equipments and high technique medical procedures. Therefore, E Hospital has planned to invest some amounts of money for telemedicine to promote international cooperation and doctor's training. This telemedicine system in our hospital can be served for different medical specialisation such as gastroenterology, cardiology, obstetrics, surgery...Therefore we hope to participate to the 6th Asia Symposium remotely as a demonstration for this tentative telemedicine system. We hope that the cooperation in telemedicine will create great opportunities for young doctors in our hospital to improve their foreign language and technical skills in the future.



Mai Ling Perman

Fiji School of Medicine

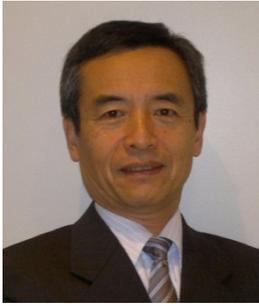
Fiji

Biography :

Dr. Mai Ling Perman, MBBS, Postgrad diploma & MMed, is a physician in internal medicine with special interests in endoscopy and cardiology. She practices general medicine and is also an endoscopist at the largest referral hospital in Fiji, the Colonial War Memorial Hospital, where the World Gastroenterology Organization (WGO) Suva training center is located. She is also an Assistant Professor in internal medicine at the Fiji School of Medicine, Fiji National University.

Dr. Perman is the current executive secretary of the newly formed Internal Medicine Society of the Pacific islands (IMSOP) and also serves as a member of the Fiji HIV Board.

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Yasuhiko Omagari
CTEC
China

Biography :

Yasuhiko Omagari joined OLYMPUS Medical Systems Corp(Endoscope Division) as a R/D Engineer. After working in several departments like Endoscope R/D, Endoscope Divisional Planning, Technical marketing in Europe, Senior liaison officer and IT business in USA, currently working as a director of OLYMPUS Training Center in Shanghai, China since 2010. The Training Center is in charge of employee training of Olympus China sales & marketing and servicing medical trainings for Chinese healthcare specialists.

Abstract :

Activities in OLYMPUS China Medical Training and Education Center

Recent Chinese healthcare service is rapidly expanding. OLYMPUS believes that it is one of the most important role of the enterprise to actively support the training and education of Chinese healthcare specialists in Endoscopy. In 2009, we established the Medical Training and Education Center(C-TEC) in Shanghai, China. The Training Center has hands-on lab, lecture rooms, product display and demonstration rooms, auditorium for meetings and teleconferences. We are also well equipped with comprehensive audiovisual system so that we can perform the hub function in domestic/international teleconferences. We will discuss the history and use of our facility with typical examples and the vision to the future.



Bayanmunkh Battulga
Health Sciences University of Mongolia
Mongolia

Biography :

Battulga Bayanmunkh, M.D. MS.

Doctoral Student of Medical Informatics, the University of Tokushima Graduate School.

Deputy Director of Mongolian Association of Medical Informatics.

2008: Doctoral Course of Medical Informatics, the University of Tokushima Graduate School.

2005 – 2008: Dean of Information Technology Center. Health Sciences University of Mongolia.

2003 – 2005: Department of Medical Education. Health Sciences University of Mongolia.

2002 – 2004: Master degree. Health Sciences University of Mongolia.

1995 – 2001: Medical doctor. Health Sciences University of Mongolia.

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Ni Thanh Le
Cho Ray Hospital
Vietnam

Biography :

Le Thanh Ni, MD. graduated from a Medical University in Bulgaria. He is working at Cho Ray Hospital since 1991 as a physician of internal medicine and infectious diseases. While was a deputy of general planning department and also the head of the hospital information system, he was the key person in establishment of Cho Ray Hospital information system. Since 2009, he involved in the activities of

telemedicine development in Vietnam by Professor Shimizu and Kyushu University. Currently, as head of department of media and clinical skills lab of Cho Ray Hospital and also a member of the Consultative Group for telemedicine development of the Ministry of Health of Vietnam, he is actively taken telemedicine into the continuous medical training programs of the hospitals in southern Vietnam.



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Atsushi Sugitani

Yonago Medical Center

Japan

Biography :

Atsushi Sugitani, M.D., PhD is a transplant surgeon who has been working for the kidney and pancreas transplantation. Dr. Sugitani is a deputy director, Department of Surgery, National Hospital Organization YONAGO MEDICAL CENTER in his native Tottori, Japan. With an attempt to extend the education and training for the nursing students, we connected the nursing school at his hospital and Kyushu University TEMDEC using Vidyo system, and had a teleconference for nursing students on each side to talk about the daily life, recent learning items and future ambition. In addition to the legal and ethical issues in the transplant medicine internationally, he is planning to use the teleconference system domestically to raise the visiting care at the regional area and to discuss medical systems in other countries such as Korea, China, Thailand, Vietnam, Taiwan and Singapore.

Abstract :

Teleconference for the nursing students “The first step for a future regional medicine in Japan”

Atsushi Sugitani,

Department of Surgery,

National Hospital Organization YONAGO MEDICAL CENTER

Recently in Japan, the medical system has been drastically changing due to the revision of the initial training system for medical school graduates and the decrease of the population in the local area. Visiting nurses and care managers cooperated with a home doctor and doctors at the core hospital will play a major role in the regional area. The education and training of the nursing students as well as the medical students would become important.

We connected the nursing school at our hospital and Kyushu University TEMDEC using Vidyo system, and had a teleconference for nursing students on each side to talk about the daily life, recent learning items and future ambition. Thanks to the high quality transferring system, we could communicate very well through the real-time pictures and sounds as well as the slide presentation, and left a large impact on the participants. We would like to increase the number of joining institutions and to expand cooperation beyond the area to make a future model of regional medicine.



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Saroj Dhital

Kathmandu Model Hospital

Nepal

Biography :

Saroj Prasad Dhital M.D., D. Med (Surg)

Founder, Chief of General Surgery, Director of Academic Affairs and Telemedicine Project

Kathmandu Model Hospital (KMH), Public Health Concern Trust (PHECT-Nepal)

Founding President,

Telemedicine Society of Nepal
Director (Health Sciences) and Executive Member
Nepal Research and Education Foundation
Overseas Supervisor, FCPS Program
College of Physicians and Surgeons, Pakistan
Columnist
NAGARIK Daily
Immediate Past-President
America-Nepal Medical Foundation, Nepal
Passion: 'Demystification of Medicine', 'Empowerment through Health Actions'
Interested in Literature, Arts and Philosophy with a number publications and radio shows



Patcharee Basu

WIDE project

Thailand

Biography :

Senior researcher at Keio University, WIDE project. Since 2004, she is a program and operation coordinator of the School on Internet Asia Project which is a collaboration among 28 partner institutions in 14 Asian countries to utilize the Internet and digital technology for higher education development. The developed programs include realtime/on-demand courses, seminars and workshops in many key areas based on the community's human resource development needs.

Abstract :

School on Internet Asia project (SOI Asia)

Introduction of School on Internet Asia project(SOI Asia) and CONNECT Asia as a development to create network and technology enabled content sharing collaboration among Asian partners through regional and national networks. It aims to broaden and enhance people's access to knowledge, sharing expertise among education and research communities. Our initial activities relating to medical science education will be shared to audience.



Pornarong Chotiwan

Chulalongkorn University

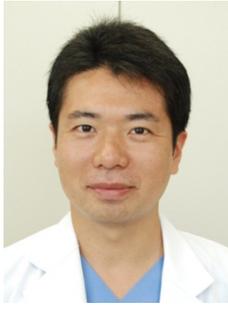
Thailand

Biography :

1971 *M.D. (Chulalongkorn University, Thailand)*
1977 *Master in Community Health (University of Liverpool)*
1980 *Diplomate Thai Board in Preventive Medicine*

Current position is Executive committee of Information Technology Center, Faculty of Medicine, Chulalongkorn University, Bangkok, Thailand. His main responsible is Telemedicine and Computer Network system of the faculty. He appointed head of computer center of King Chulalongkorn Memorial Hospital, a 1500 beds hospital of Thai Red Cross Society, for more than 10 years. He was also head of computer center of Faculty of Medicine for almost 20 years, responsible to a network of more than 5000 nodes scattered around more than 50 buildings in the campus. In academic field, he is an Assistant Professor in Department of Preventive and Social Medicine

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Yosuke Seki
Yotsuya Medical Cube
Japan

Biography :

Dr. Yosuke Seki, M.D. Ph.D. is a consultant surgeon and the head of Obesity and Diabetes Clinical Research Unit at the Weight Loss and Metabolic Surgery Center at Yotsuya Medical Cube, Tokyo, Japan. He completed two clinical fellowships in bariatric surgery. One was at the Flinders University Medical School (Adelaide, SA, Australia) in 2007 where he experienced over 100 primary laparoscopic adjustable gastric banding surgeries as well as some revision cases and also learnt how to organize bariatric team under Prof. Toouli and Dr. Kow. The other was at the University of Minnesota Medical School (MN, USA), one of the leading facilities in the field of bariatric/metabolic surgery, where he joined Prof. Buchwald and Prof. Ikramuddin and experienced more complicated procedures such as open/lap Roux-en-Y gastric bypass, open/lap/robotic DS and some revision cases. He has recently designated as an International Center of Excellence (ICE) surgeon by the Surgical Review Corporation in the US. His clinical and research interest is the effects of gastrointestinal surgery on the pathophysiology of type 2 diabetes, especially for Asian. Currently, he is conducting the first prospective trial in Japan investigating the safety and the effectiveness of laparoscopic sleeve gastrectomy with duodenal-jejunal bypass for medically uncontrolled Japanese type 2 diabetics whose BMIs are between 27.5 and 34.9 kg/m² as one of the primary investigators.



Albert AU
Hong Kong University
China

Biography :

Mr. Albert Au, M.Sc. M.Phil. MIET is Senior I.T. Manager in the Faculty of Medicine, The University of Hong Kong. He has been working for the Faculty for more than 15 years. He has more than 10 years experience in telemedicine. Microwave, free space optics, fibre optics, and internet were adopted in doing telemedicine. Mr Au leads a team of eight persons to provide technical support for the Medical Faculty. Currently, Mr Au works more in the projects of audio-visual systems and web-based applications.



Jung-Hun Lee
Seoul National University Bundang Hospital
Korea

Biography :

Mr. Junghun Lee, is network engineer for tele-medical activities which include tele-conference and tele-live-Surgery in Seoul National University Bundang Hospital, Korea. Currently works in the telemedicine project which started in 2004. This project makes Seoul National University Bundang Hospital as the most advanced group of telemedicine in Korea and Asia-Pacific regions as well. These activities are collaborated with many distinguished centers in Europe and USA. Mr. Junghun Lee is currently member of medical working group of APAN and play a key role in medical working group of Korea. He works for Professor Ho-Seong Han, M.D. Ph.D., who is co-chairman in Asian Telemedical Working group. He is well renowned surgeon, majoring in HBP surgery and currently Chairman of Department of Surgery in Seoul National University Bundang Hospital and also a director of Cancer Center in this hospital.



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Mohamad Zahir Ahmad

University of Malaya

Malaysia

Biography :

Mohamad Zahir Ahmad is a Senior Information Technology Officer, managing the Network and IT Infrastructure for the University Malaya Medical Center. Activey involved in Teleconferencing for the University Malaya from 2010 and become the coordinator for Teleconferencing activity for the University of Malaya. He led a Telemedicine team to assist the surgeon, gastroenterologist, oncologist and doctors to plan, manage and coordinate the Teleconferencing activities.

Abstract :

University of Malaya (UOM) is the premier university in Malaysia and the first teaching hospital in the country. The university is well known of producing the best doctors for the country.

Established in 1949 in Singapore and then reestablished in Kuala Lumpur on 1962. UOM currently was listed under world top 100 universities in the world for the academic and research ranking.

UOM vision is to be an internationally renowned institution of higher learning in research, innovation, publication and teaching. Being the top university is Malaysia, UoM is aimed to be the leader in term of research and education by using a latest technology including research and collaboration with other university in the region using telemedicine and video conferencing technologies.

Currently for 2012, UoM had conducted few workshop in collaboration with vendors for telemedicine activities for broadcasting live operation from operating theater to auditorium for case discussion and live surgery.

UoM also had conducted a national annual conference for Malaysian Endoscopy Conference 2012 in April 2012 which also cordially participate by Univ Of Kyushu, Japan, Asan Medical Center, Korea, Bach Mai Hospital, Vietnam and Mahidol Univ, Thailand. This is the first time for the annual conference to have live surgery transmission with other university. UoM also actively take parts in the APAN programs and also Medical Workign Group meeting for exchange of ideas and experience.

UoM also had put in some investment for 2012 for mobile H323 video conferencing set to ease the setup and preparation for the live surgery transmission from operation theater where the mobile can be use anywhere within the hospital. The set which is using fully HD technology complete with recorder was built at very short time and low cost.

UoM is also given opportunities to use and experience the Vidyo conferencing software which utilize the same DVTS equipment which is much better than DVTS and DVTS plus in term of quality, performance and bandwidth usage. We are looking to have more activities for case presentation or live surgery for next APAN activities as it support more remote participant and quality more than appealing. UoM also would like to explore more on Headen Bridge which may also provide an option for high quality video conferencing experience for the APAN community.



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Kazuto Noguchi **Ehime University** **Japan**

Biography :

Kazuto Noguchi received the BS., MS., and Ph. D. degrees in electrical engineering from Waseda University, Tokyo, Japan, in 1984, 1986, and 2001, respectively. After joining Photonics Laboratories, Nippon Telegraph and Telephone Corporation (NTT), Tokyo, in 1986, he worked on high-speed LiNbO₃ optical modulators, full-mesh WDM networks, and NTT's R&E network testbed called GEMnet2. Since 2011, has been a professor of Center for Information Technology, Ehime University, Matsuyama. His current research interests are optical communication networks and telemedicine. Dr. Noguchi is a member of the Institute of Electronics, Information and Communication Engineers, the Japan Society of Applied Physics, and the Institute of Electrical and Electronics Engineers, Inc.

Abstract :

Remote Seminar Trial of Fetal Echocardiography using SINET4

Kazuto Noguchiⁱ⁾, Motoyoshi Kawatakiⁱⁱ⁾, Emiko Abeⁱⁱⁱ⁾, Hisao Uose^{iv)}, and Shigeo Urushidani^{v)}

i) Ehime University

ii) Kanagawa Children's Medical Center

iii) Ehime Prefectural Central Hospital

iv) NTT Advanced Technology Corporation

v) National Institute of Informatics

Although fetal echocardiography is one of the most promising treatment technologies for diagnostics in utero treatment, the number of fetal medicine specialists in Ehime is still small, and pregnant women with diseased fetus are occasionally unable to receive adequate perinatal care and management. To overcome these difficulties, we have started a remote seminar trial between Tokyo and Ehime, which are over 800 km apart, using SINET4 (Science Information NETwork) for the distribution of new fetal treatment technology. High-definition teleconference systems with H.264 codec were connected to SINET4 at NII in Tokyo and at Ehime University in Matsuyama, Ehime. Several medical seminars including 3-dimensional ultrasound images of fetal echocardiography, voices, and slides in Tokyo were successfully transmitted to Ehime for two days. The transmission rate was about 10 Mbps. The system was also tested to assess the potential of providing prenatal treatment using these networks.



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Yui Murase **Keio University** **Japan**

Biography :

Yui Murase is a Ph.D. course student in Keio University Graduate School of Media Design Kazunori Sugiura Lab. Her major is human-computer interaction and Web services in daily life. She is creating living-room social communication service for the elderly. It connect living-room screen with families and friends who doesn't live together.



Yasuichi Kitamura

APAN-JP

Japan

Biography :

Dr. Yasuichi Kitamura, ED, Ph.D. is the researcher, majoring in Internet communication technology. He is the researcher of the National Institute of Information and Communications Technology (NICT) since 1989 and is one of the engineers at the Asia-Pacific Advanced Network (APAN) since 1997. He has been working for getting the high performance communication real with using the network monitoring technology. At APAN Tokyo XP, two multipoint communication units were set at Tokyo XP on April this year and these units have been supporting the research activities of TEMEC and APAN medical WG.



Dipak Singh

ERNET

India

Biography :

Dipak Singh is Director in ERNET India. He heads network operations in ERNET. He had obtained Master degree in Applied Physics from Calcutta University and had overall 25 years of experience in IT related activity. He had played great role in expansion of ERNET. His major contribution in ERNET has been upgradation of ERNET Backbone, upgradation of network infrastructure, deployment of MPLS in ERNET backbone, Internal & external routing, Deployment of IPv6 testbed in ERNET, High-speed communication fabric for Indian grid GARUDA. Mr Dipak Singh also represented ERNET India in European Commission(EC) funded projects. Mr Singh is representing ERNET in APAN and played active role of in connecting India to Trans Eurasia Informaion Network(TEIN3).



Seiji Kumagai

Information Sevices International-Dentsu, Ltd.

Japan

Biography :

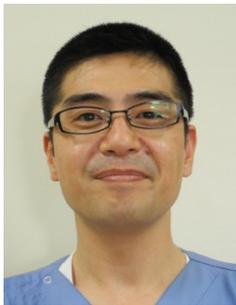
Seiji KUMAGAI

Chief Research Scientist of Open Innovation Laboratory, ISID (Information Services International Dentsu, Ltd.)

He received Bachelor of Engineering degree in electrical engineering from Kyoto Institute of Technology in 1978. From 1978 to 1987, he developed Micro-computer system and UNIX based system. He joined System Development and Consulting Dept. of ISID in 1987. He worked as a Consultant of Networking, UNIX, Internet, Security and Messaging System. Currently he is a Chief Research Scientist of Open Innovation Laboratory of ISID. His research interests is information sharing, multimedia communication and Indoor Positioning System.

Books: He wrote 8 books. These are published from Nihon Keizai Shimbun, Inc. and Nikkei Business Publications, Inc.

Magazines: He wrote over 100 articles in many Japanese magazines.



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Naotoshi Atoda National Cancer Center Japan

Biography :

Naotoshi Atoda works for Department of Radiology at National Cancer Center Hospital in Japan as a chief radiological technologist of interventional radiology. Previously, he worked at a manufacturer of factory automation equipments.

He is an executive board member of Japan Society for Medical Image Management (JSMIM) and the lecture about a medical information system is performed for the radiological technologist.

Abstract :

A DVTS experience in an international live demonstration session from the interventional radiology suite of National Cancer Center Hospital.

We report an experience of the use of DVTS for a live demonstration at the SGI 2012, the 6th Meeting of the Society of Gastrointestinal Intervention. Interventional radiology procedures (catheter surgery) at our hospital were brought to the remote conference venue in Seoul, live from our interventional radiology suite in Tokyo, with a live discussion via DVTS. Although the live was successful on the meeting day, we faced a lot of problems both on audio and visual during the preparation period.

Lessons learned from our experience:

1. Connecting tests (rehearsals) were the key to establish a stable communication.
2. A multi- disciplinary team was organized and successfully worked. The team was consisted of physicians, radiological technologists, nurses, management officers, and audio and visual professionals.
3. Technical assistances from Kyusyu University resolved many problems. Thus, the extramural collaboration may help inexperienced institutions to use the DVTS systems.



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Dinesh Kumar Taneja ILBS India

Biography :

Dinesh Taneja, M.E. (Computers Technology and Applications) is a professional with 19 years of rich experience in spearheading and managing the IT/ Telecom operations for large-scale organizations. He is an IT infrastructure architect, strategist & implementer with demonstrated abilities in the implementation of IT infrastructure and new technology for streamlining IT related operations. He is presently working at Institute of Liver and Biliary Sciences, New Delhi, India as Sr. manager IT to assist the medical community for telemedicine and related activities.

Abstract :

Institute of Liver and Biliary Sciences

Introduction

The Institute of Liver & Biliary Sciences (ILBS) has been established by the Government of the National Capital Territory of Delhi as an autonomous institute, under the Societies act.

The mission of ILBS is to become a dedicated international centre of excellence for the diagnosis, management and advanced training and research in the field of liver and biliary diseases.

ILBS is a deemed university and aspires to become a unique model for an academic career both for the national and international students and the faculty. ILBS has started Telemedicine facility for research,

development, education & training in the field of Liver & Biliary Research. ILBS telemedicine network has connections and partnerships between medical specialists, doctors, medical facilities, patients and families.

Activity Report:

ILBS ECHO: Using tele-health technology and clinical management tools ILBS-ECHO trains and supports physicians in the community to develop knowledge and self-efficacy on a variety of diseases not usually considered within their scope of practice. As a result, these physicians can deliver best-practice care for complex health conditions in community-based sites where this specialty care was previously unavailable.

Tele Pathology: ILBS is using Tele pathology using h.323 communication system connected with digital microscope for case study discussions amongst medical community.

Live Streaming: ILBS has developed live streaming of all CME programs at website using Adobe Live Streaming which can be viewed and participated by large community from their home using internet connections.

Live endoscopy: ILBS has developed live streaming of endoscopy procedures using DVTS based system and the interactive session is done using h.323 communication.



Mehta Shaesta
Tata Hospital
India

Biography :

Dr Shaesta Mehta is presently Professor Gastroenterology at the Tata Memorial Hospital Mumbai and a teaching faculty of the Homi Bhabha National Institute (deemed university) in Mumbai.

Dr Shaesta Mehta obtained her medical degree from the Mumbai University. After completion of Postgraduate training in Internal Medicine, she continued her subspecialty training in Gastroenterology from the Tata Memorial Hospital Mumbai. Her specialties include besides gastroenterology, digestive oncology and advanced endoscopy.

She has participated as principal investigator in global clinical trials and also received awards for her scientific contribution in endoscopic ultrasound and other endoscopy procedures.

She has served as member of Endosonography Club of India in 2002, Governing council member of Society of Gastrointestinal Endoscopy in 2006 and Clinical Scientist for Department of Atomic Energy Vision 2020 for development of new technology projects in 2003. Her interest lies in advanced endoscopy and medical education and training. For this reason she pursued the APAN fellowship program at Kyushu University in 2008.



Manish Biyani
Biyani Group of Colleges
India

Biography :

Dr Manish Biyani has a dual responsibility in India and Japan. In India, he is a founding director of Biyani Group of Colleges (For Girls) in Jaipur city, where he is involved to develop research-based interdisciplinary curriculum with a mission of women empowerment. He is also vice-president of Jaipur Rural Health & Development Trust in India. In Japan, he is a faculty staff member of Bioengineering department at The University of Tokyo, where he is involved in both academic and project research works. He is also president of Indian scientist association in Japan (Tokyo-chapter), where he is involved to promote scientific interaction and research networks between India and Japan.

Dr Biyani received his double graduation degrees in Science (1993) and Pharmacy (1997) from University of Rajasthan in India, Master of Engineering (2001) and PhD in Biological Sciences (2004) from Saitama University in Japan. He was a Postdoctoral Fellow in the Ichiki laboratory at the University of Tokyo, where he used nanobio-device tools to develop high-speed molecular evolution reactor for screening novel and highly-functional bio-molecules. Dr Biyani has pursued a career in basic research in biotechnology and its extended application in various fields including medicine and Healthcare. His major areas of research interest include Molecular Evolutionary Engineering, Low-cost molecular diagnostics, Bio-drug discovery, DNA-based nano architecture, Functional Proteomics.

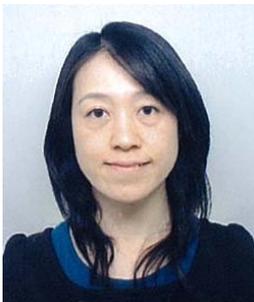
Dr Biyani is the recipient of numerous prestigious awards including JB OUP award from International Union of Biochemistry and Molecular Biology, Bursary award from International Genetics Federation, MEXT scholarship award from Japanese Ministry of Science & Technology, Outstanding academic award from Pharmacy Medical Association of Rajasthan. He is also an ad hoc reviewer in many scientific journals including Biophysical Journal, Analytical Biochemistry, Electrophoresis, Biopolymer, Nucleic Acids Research.

Abstract :

Bringing tele-diagnostics tools from bench-to-bedside.

An affordable, accurate and rapid diagnostic test is a critical success factor in remote monitoring. Significant advances in diagnostics have occurred during last decade following the development of molecular-based technologies which offers an order of magnitude much higher sensitivity to detect pathogens or disease-related gene mutations than traditional conventional diagnosis. However, most molecular diagnostic tests such as PCR-based molecular detection approach require the invasive acquisition of blood or tissue samples and a complex process that usually comes at the price of high cost, longer time and requirement of a high operating-skill which restricts its potential role in diagnosis. Therefore, the conventional and currently available diagnostics are not suitable for most priority global health care where low-cost, ease of use, and field-rugged solutions are imperative.

In this talk, I will discuss our work transforming our bold ideas to develop a simple, rapid, robust, portable and cost-effective molecular surveillance system for early diagnosis of infectious disease such as tuberculosis, malaria to provide 'sample-to-answer' test in the resource-poor health facilities. This portable device is based on the ASSURED criteria: Affordable (<\$4 per running sample), Specific (genotype or subtype-level), Sensitive (single-base difference), User friendly (in-house application), Rapid and robust (30-60 min), Equipment-free (portable-to-chip) and Delivered to those who need it (online).



Yoko Noda
Kyushu University Hospital
Japan

Biography :

Yoko Noda is the International Coordinator for the Telemedicine Development Center of Asia at Kyushu University Hospital in Fukuoka, Japan. She is the current Secretariat for the Medical Working Group of Asia-Pacific Advanced Network (APAN). She holds a Bachelor of Arts degree in Linguistics (Specialization in Cognition and Language) from University of California, San Diego. While at UCSD, she was involved in research on language processing that used event-related potentials to search for the neurological basis for linguistically derived theories of grammar.



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Kuriko Kudo
Kyushu University Hospital
Japan

Biography :

Kuriko Kudo, Ph. D studied virtual human representation by using 3DCG and animatronics at Kyushu University Graduate School of Design Genda Lab. Her major is digital archiving focused on Japanese traditional performing arts such as kabuki (especially its make-up). She used the 3DCG system to represent faces of kabuki actors and replicas, based on physical measuring and modeling that accounts for human motion, human shape, lighting, and the spectral reflectance of cosmetics. After she presented her work several times, including at the "Great Robot Exhibition" at the National Museum of Nature and Science Tokyo and SIGGRAPH 2008, she receive a doctorate in design. Since August 2011, she has worked as an engineer at the Telemedicine Development Center of Asia in Kyushu University Hospital.



Yasuaki Antoku
Kyushu University Hospital
Japan

Biography :

Yasuaki Antoku is an engineer at Kyushu University Hospital in Japan. He majored in Information Engineering for his Bachelor's degree, and in Design Engineering for his Master's. He is chiefly involved in the management and operation of the computer network at Kyushu University Hospital. He is one of the members of the Medical Information department at the hospital. Moreover, he is participating in Telemedicine activity as one of the local engineers at Kyushu University.