# "Overcoming Challenges through Collaboration and Innovation" – ATCCS 2018

# Feng Liu, Manting Li, Yan Wang

#### Editorial Office, AME Publishing Company

Correspondence to: Feng Liu, Manting Li, Yan Wang. Editorial Office, AME Publishing Company. Email: jtd@amepc.org.

Submitted Jun 10, 2018. Accepted for publication Jun 21, 2018. doi: 10.21037/jtd.2018.06.121 View this article at: http://dx.doi.org/10.21037/jtd.2018.06.121

Asia Thoracic Cancer Care Summit (ATCCS) 2018 was held on 13–14 Apr, at Sheraton Hong Kong Hotel & Towers, Hong Kong. An army of world-renowned experts in the field of thoracic surgery, including Prof. Calvin S. H. Ng, Department of Surgery, The Chinese University of Hong Kong, Hong Kong, China; Prof. Gaetano Rocco, Thoracic Department, National Cancer Institute Pascale Foundation, IRCCS, Naples, Italy; Dr. William S. Krimsky, Center for Interventional Pulmonology, MedStar Franklin Square Medical Center, Baltimore, USA; Prof. Ka Fai To, Department of Anatomical and Cellular Pathology, The Chinese University of Hong Kong, Hong Kong, China; Dr. Diego Gonzalez Rivas, Department of Thoracic Surgery, Coruña University Hospital, Coruña, Spain; Prof. Anthony P. Yim, former Chair Professor of Surgery, The Chinese University of Hong Kong, Hong Kong, China; Prof. Mingyon Mun, Department of Thoracic Surgery Oncology, Cancer Institute Hospital, Tokyo, Japan; Prof. Hyun Koo Kim, Department of Thoracic & Cardiovascular Surgery, College of Medicine, Korea University Guro Hospital, Seoul, Korea; Prof. Sanghoon Jheon, Department of Thoracic and Cardiovascular Surgery, Seoul National University Bundang Hospital, Seongnam, Korea, and so on was invited to this highly-effective academic platform (*Figure 1*).

Through lectures, discussions, and workshops, this summit brought you the most up-to-date information and the advances in thoracic surgery. The world-famous experts gathered and shared the clinical cases and innovative ideas and inspired you with a glimpse of future techniques and



Figure 1 Group photo.

Journal of Thoracic Disease, Vol 10, No 7 July 2018



**Figure 2** The experts were delivering a presentation. (A) Prof. Calvin S. H. Ng; (B) Prof. Gaetano Rocco; (C) Dr. William S. Krimsky.



Figure 3 Prof. Ka Fai To.

technologies in a safe and effective way.

Prof. Calvin S. H. Ng delivered a welcome speech by introducing the process and theme of the summit First of all, Prof. Gaetano Rocco introduced various advanced developments in the treatment of lung cancer and provided a lot of new perspectives. After that, William S. Krimsky gave a speech about "Towards an optimization of bronchoscopic approaches to the diagnosis and treatment of the pulmonary nodules". He concluded that accurate intraprocedural visualization and accurate catheter localization are still required nowadays (*Figure 2*).

Prof. Ka Fai To gave a speech about "Latest development



**Figure 4** The highlights of Prof. Anthony P. Yim's book launch event. (A) Prof. Anthony P. Yim was signing his name on this art album); (B,C,D) Prof. Yim with Prof. Sanghoon Jheon; Prof. Gaetano Rocco and AME Science Editors, respectively.

of liquid biopsy". He had a detailed explanation about the challenges and limitations of liquid biopsy, providing a lot of sharp insights for the experts. After that, Prof. Calvin S. H. Ng talked about "Diagnosing lung lesions—going hybrid", and showed some examples. He introduced the fundamental situation of lung disease in Asia. At the end of speech, he summarized that small lesions were increasingly part of our workload, secondly, the advanced localization using technology and techniques with electromagnetic navigation bronchoscopy (ENB) marking and hook wire in the hybrid operating room setting are safe and effective. Thirdly these approaches might improve accuracy, reduce error and increase safety (*Figure 3*).

Prof. Anthony P. Yim was invited to this summit. However, surprisingly, this time he was not introducing research related to lung surgery, but introducing his second career as an artist: the painter. He introduced his paintings, his use of different tricks to depict his own mood of painting which ease the rhythmic of academic discussion (*Figures 4 and 5*).

Dr. Diego Gonzalez Rivas introduced single port VATS for advanced cases. Prof. Mingyon Mun introduced novel approached to VATS segmentectomy (*Figure 6*).

Prof. Hyun Koo Kim shared his experience in VATS



Figure 5 Prof. Anthony P. Yim.

surgery. Prof. Mahmoud Ismail, Department Head of Thoracic Surgery in Germany, displayed single port VATS and robotic thymectomy surgery. Prof. Sanghoon Jheon was not focused on his surgery research this time, but on his own scientific training team, he showed his high-tech operating room, various surgeons' roles in this advanced hospital, as well as the vision for the future hospital treatment (*Figure 7*).

#### **ENB Workshop**

This session mainly elucidated the advances and new horizons of diagnostics in thoracic surgery. Dr. William S. Krimsky mainly focused on the application of ENB and the role of ENB in practice. By the means of showing vivid pictures and examples, he methodically referred four parts about ENB: Planning & Automatic Registration Best Practice, Catheter Overview & Sampling Strategies, Central Airway Planning & Procedure and Transbronchial Placement of Markers. During the discussion part, Dr. William S. Krimsky also precisely answered the questions such as how fast the sensor is and how long it can maintain, etc. (*Figure 8*).

And then, in terms of ENB under intravenous sedation (IVS), Dr. Chung Ming Chu, Department of Medicine & Geriatrics, United Christian Hospital, put forward some of his tips and tricks. He pinpointed that although the majority of ENBs in earlier studies were performed under general anesthesia (GA), later reports suggested that the diagnostic yield of ENB under IVS was comparable and was timesaving. However, he also pointed out that it is technically



**Figure 6** The experts were delivering a presentation. (A) Dr. Diego Gonzalez Rivas; (B) Prof. Mingyon Mun.



**Figure 7** The experts were delivering a presentation. (A) Prof. Sanghoon Jheon; (B) Prof. Hyun Koo Kim; (C) Dr. Mahmoud Ismail.

Journal of Thoracic Disease, Vol 10, No 7 July 2018



Figure 8 Prof. William S. Krimsky.



Figure 9 Prof. Chung Ming Chu.

challenging when compared to its performance under GA, thus the conclusion is that ENB under IVS is required to maximize its diagnostic yield and safety (*Figure 9*).

For the next session, Prof. Hyun Koo Kim, Toshihiko Sato, and Prof. Min-Woong Kang, Department of Thoracic and Cardiovascular Surgery, Chungnam National University, Daejeon, Korea, separately shared and illustrated their practical experiences of ENB uses in their own hospitals respectively (*Figure 10*).

# Communication and collision of various novel treatment technologies

Prof. Betty Tong, Division of Cardiovascular and Thoracic Surgery, Department of Surgery, Duke University Medical Center, USA shared with us "Sublobar resection for lung cancer-the past, present and future". Prof. Tong pointed out that sub-lobectomy is a feasible method for resection of non-small cell lung cancer. It has appropriate perioperative and oncological results. In addition, she further indicated



**Figure 10** The experts were delivering a presentation. (A) Prof. Hyun Koo Kim; (B) Professor Toshihiko Sato; (C) Prof. Min-Woong Kang.

that LDCT lung cancer screening would provide ample opportunities for the consideration of sub-lobar resection in the setting of early stage NSCLC. Dr. Tadasu Kohno, Department of Thoracic Surgery, Respiratory Centre, Toranomon Hospital, Tokyo, Japan, expressed his views on how to manage the complications of thoracoscopic surgery. Firstly, Dr. Kohno pointed out that surgeons need to have a complete understanding of the anatomy and sufficient dissection. Secondly, minimizing the complications with thoracoscopic techniques. At the same time, he also pointed out that thoracoscopic suture technique has a significant effect in managing complications. Prof. Yin Kai Chao, Division of Thoracic & Cardiovascular Surgery Chang Gung Memorial Hospital Taoyuan, Taiwan, explained in detail the multi-dimensional analysis of image guided VATS and emphasized that the reciprocal positioning of the patient, surgical table and the C-arm is paramount to optimize the performance of the iVATS. Haiquan Chen, Department of Thoracic Surgery Fudan University, Shanghai Cancer Center, Shanghai, China, shared the challenges and opportunities encountered in lung cancer screening in China (Figure 11).

Prof. Noriaki Kurimoto, Department of Medical Oncology and Respiratory Medicine, Shimane University Hospital, Izumo, Japan, shared his view on the current and prospect of the peripheral EBU. Prof. Jang Ming Lee, Department of Thoracic Surgery, National Taiwan

E601

E602

Liu et al. ATCCS 2018



**Figure 11** The experts were delivering a presentation. (A) Prof. Betty Tong; (B) Prof. Tadasu Kohno; (C) Prof. Yin Kai Chao; (D) Prof. Haiquan Chen.

University Hospital, Taiwan, detailed the singleport esophagectomy and compared its advantages and disadvantages. He clearly pointed out that MIE with singleport is a feasible procedure to treat esophageal cancer with comparable perioperative surgical results of multiincision MIE. Prof. Wentao Fang, Department of Thoracic Surgery, Shanghai Chest Hospital, Shanghai, China, gave a detailed introduction to minimally invasive thymectomy for thymic malignancies. He pointed out that MIE has superior operative effects, including safe surgery and better postoperative recovery. At the same time, he also recommended that MIE would be an acceptable method for thymoma and thymic cancer. Prof. Lanjun Zhang, Department of Thoracic Surgery, Sun Yat-sen University Cancer Center, Guangzhou, China, shared the topic of the reconstruction of bony chest-wall by using bio-material artificial rib and pleura. He pointed out that the biomaterial artificial chest-wall has good biocompatibility, plasticity and strength to accommodate human bodies. It is safe after long-term implantation (Figure 12).

On day 2, five experts from the conference conducted a simple seminar. Speakers mainly focused on the identification of lung cancer components and some new surgical aids. The wonderful speeches won applause from everyone.



**Figure 12** The experts were delivering a presentation. (A) Prof. Noriaki Kurimoto; (B) Prof. Jang Ming Lee; (C) Prof. Wentao Fang; (D) Prof. Lanjun Zhang.

Dr. Ze Rui Zhao, Department of Surgery, The Chinese University of Hong Kong, Hong Kong, China, put forward his own opinion on "Rapid intra-op identification of micropapillary or solid components for early-stage lung cancer"; Prof. Yin Kai Chao shared the topic of "Subxiphoid robot-assisted thoracoscopic surgery-an update"; Prof. Zheng Li, Division of Biomedical Engineering Research, Department of Surgery, The Chinese University of Hong Kong, Hong Kong, China, introduced "Soft robots and cameras in MIE"; Rainbow W. H. Lau, Department of Surgery, The Chinese University of Hong Kong, China, shared "3D printing in thoracic surgery"; Prof. Min-Woong Kang, shared the topic of "New stapler for surgical margins" (*Figure 13*).

The final session of the conference was a lunch symposium focusing on the experience of using Signia in VATS lobectomy by Prof. Mingyon Mun.

The ATCCS brought together world-famous Chinese and international experts and scholars. It was a high standard academic platform where the experts could gather and promote academic exchanges and cooperation. Also, the summit showcased numerous of the clinical cases and scientific researches. At the same time, the success of the ATCCS in 2018 was even a tremendously boost for the development of thoracic surgery!



Figure 13 The experts were delivering a presentation. (A) Dr. Ze Rui Zhao; (B) Prof. Yin Kai Chao; (C) Prof. Zheng Li; (D) Dr. Rainbow W. H. Lau; (E) Prof. Min-Woong Kang.

# Acknowledgements

None.

**Cite this article as:** Liu F, Li M, Wang Y. "Overcoming Challenges through Collaboration and Innovation"—ATCCS 2018. J Thorac Dis 2018;10(7):E598-E603. doi: 10.21037/ jtd.2018.06.121

# Footnote

*Conflicts of Interest:* The authors have no conflicts of interest to declare.