MESSAGE FROM THE PRESIDENT

Zong-Ming Li, PhD
Cleveland Clinic, Ohio, USA

Dear Fellow WACBE Members:

It is a distinct pleasure to present to you this issue of the WACBE Newsletter amidst the auspicious holiday of Chinese New Year. As you read through this newsletter, I believe you will share my excitement about the steady growth of our Association.

One of our highlights in 2015 is the 7th WACBE World Congress on Bioengineering, which will take place during July 6-8, 2015 in Singapore. Our local congress organizers, Professor James Goh and his team, are putting forth dedicated effort to assemble an enriching program with plenary lectures, keynote talks, special symposia, open paper presentations, product exhibitions, student activities, and social events. You are cordially invited to join this stimulating event, benefiting from our intimate atmosphere of networking and scientific exchanges with world-class biomedical engineers. As eloquently recounted by our founding president in this newsletter, the WACBE congress series has a proud origination by the world’s pioneering bioengineers, Professors Y. C. Fung, Shu Chien, Savio L. W. Woo, Ned Hwang, among others. The congress this year will surely continue our tradition of excellence. You do not want to miss this inspirational event at one of the beautiful islands of Southeast Asia! Listen to what Vivian has to say about Singapore!

Thanks to the efforts led by Professor Jason Chen, WACBE has reached another milestone by having its own affiliated publication – Journal of Medical and Biological Engineering (JMBE). JMBE has been the official journal of the Biomedical Engineering Society of Taiwan and recently made major advancements to enhance global visibility, including co-publishing with Springer and expanding the editorial team. JMBE will be an important platform for WACBE members to disseminate scientific knowledge in the field of biomedical engineering. The Editors-in-Chief, Professors Kai-Nan An and Fong-Chin Su, look forward to receiving submissions of your best research work. For further information about the journal, visit the website at www.springer.com/40846.

In the last year, WACBE had opportunities to participate in and contribute to many regional BME events. Together with the School of Biomedical Science and Medical Engineering at Beihang University and the Chinese Society of Biomedical Engineering, WACBE co-organized the First BME Symposium of Beihang University in Beijing during May 15-16, 2014. This meeting was a great success and particularly popular with BME graduate students and junior faculty from local and national universities and hospitals. Professor Savio L-Y. Woo served as the chairperson of the symposium, and Professors Yubo Fan and Cheng-Kung Cheng and myself were co-chairs. The meeting included many state-of-the-art bioengineering topics that were presented by Professors Kam Leong, Yubo Fan, Jason Chen, Ming Zhang, Qingmin Luo, Zonglai Jiang, Guoan Li, Zong-Ming Li, Mingxi Wan, Ping Wang, Abraham Lee, Xiaoyan Deng, Wufan Chen, Dezhong Rao, Jia-Yi Lin, Toru Suguro, Richard Black, Jia Hua, and Andrei Degermendzhi. In this newsletter, you will also read about other wonderful BME events that occurred in the Asian Pacific region. They include the 2014 Biomedical Engineering International Conference in Hong Kong, Training Course on Medical Device in Hong Kong, 1st Global Conference on Biomedical Engineering, and 9th Asian Pacific Conference on Medical and Biological Engineering in Taiwan. In the future, WACBE would like to further develop partnerships with regional stakeholders, offer its vast expertise in BME, and enhance international perspective. Such WACBE activities are particularly beneficial for local students and junior bioengineers to experience international exchanges without the encumbrance of extensive travel.

While we value the multidisciplinary and interdisciplinary nature of biomedical engineering, we also benefit from in-depth dialogue amongst colleagues with more specialized interests. Professor Aijun Wang is eager to work with the WACBE council to develop Bioengineering Interest Groups (BIGs). We hope this BIG initiative meets your active response and participation, generating more opportunities for subject-specific workshops, focused discussions, research collaboration, professional networking, and leadership positions. Please read more details of the BIG initiative in this newsletter, and most importantly, get involved!

We also include several reports from council members and highlights of national/regional BME organizations. I am thankful for the contributors to this newsletter. Special appreciation goes to our Newsletter Editor, Professor Siew-Lok Toh, for his tremendous effort to organize and edit the details of this issue. It is an amazing experience for me to work with these distinguished colleagues and friends who share the passion of advancing our Association.

A number of new council members will be elected this year. We strive to form a balanced council with individuals

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The WACBE Newsletter welcomes letters to the Editor (info@wacbe.org). All material submitted for consideration is subject to editing and condensation. Advertising rates for display ads are available from the WACBE office and by visiting www.wacbe.org.

Deadlines for receipt of material are: October 31 and April 30. All copy is subject to the editorial policy of the Newsletter.
representing diverse geographic countries/regions and a variety of BME specialties. Our immediate past president, Professor Kirk Shung, and his Nominating Committee are assembling outstanding candidates who want to contribute to WACBE’s continuing growth. Please cast your votes when the ballot becomes available from our Secretary Professor Ming Zhang’s office in the coming weeks. Serving on the WACBE Council is a rewarding experience and provides the opportunity of working with colleagues to shape the future of our professional field and community.

I thank you all as fellow WACBE members for your enthusiasm about and support of our Association. On behalf of the WACBE council, I extend best wishes to you and your families for a new year filled with joy and prosperity!

MESSAGE FROM THE WACBE FOUNDING PRESIDENT
Savio L-Y. Woo

About 20 to 25 years ago, I was seeing and meeting more and more Asian participants at various bioengineering conferences. A review of the author index of any conference proceedings, I could find a large number of authors with Chinese surnames. Thus, the thought of getting a large number of Chinese bioengineers, who reside in all parts of the world into one organization to exchange ideas and to educate our young bioengineers began to circulate in my mind. After consulting with a large number of pioneers of Chinese origin in the bioengineering field and countless conversations with Professors Y. C. Fung, Shu Chien and Ned Hwang, the first World congress for Chinese Biomedical Engineers, with the enthusiastic leadership of Professor Hwang took place in Taipei, Taiwan between December 11 - 15, 2002. Thirty four (34) leaders in our field were invited and came to give lectures on their respective fields in tutorial fashion. There were over 400 attendees from all over the world including a large delegate from China. The event took place in one conference room so that we could all learn from each other.

In addition to a wonderful four days of exciting scientific exchanges, two very important events resulted from this congress. One was a book that captured the essence of the Congress, entitled “Frontier in Biomedical Engineering” edited by Dr. Hwang and myself. The contributions were grouped into four major sub-disciplines: I. Biomechanics of Musculoskeletal and Circulation Systems; II. Imaging and Diagnostics; III. Molecular and Tissue Engineering; and IV. Nano-science, Drug Delivery and New Instrumentation. Professor Fung wrote a Forward plus a leading chapter based on his keynote lecture.

The second and even more exciting event is the formation of the World Association of Chinese Biomedical Engineers (WACBE). To do this, I have the tremendous honor and pleasure to collaborate with a large number of leaders and I thank them all for their tremendous expertise, invigorating enthusiasm and outstanding leadership. Now, we have the hugely successful biennial WACBE congresses! Our collaboration with journals is another important step going forward for WACBE.

It is easy to envisage that WACBE could become one of the largest bioengineering societies in the world. But I am hoping that we would also become the best! You may have heard that on occasions, I like to quote Dr. Carl Sagan who wrote a bit about UFO’s in his book entitled “In the Demon Haunted World”.

The question people usually ask is, “Do you believe in UFOs?” Rather Dr. Sagan said, “The question should be asked is ‘How good is the evidence that UFOs are alien spaceships?’” You see, in the field of biomedical engineering; and WACBE in particular, we need to be asking the right questions first before we delve into research projects to answer them. Better and clearer thinking is the “candle in the dark” and that is what we should be focusing rather than be whirl winded into doing what are trendy and popular. WACBE should adopt such a formula for teaching, research and exchange of ideas to better understanding of the disease processes, to come up with the correct answers, to develop appropriate treatment strategies and eventually, to translate into more successful patient outcome.

Thus, I strongly urge that all of you, who care and love WACBE to keep this flame going strong, to devote your energy in teaching and stimulating our young, to develop new and closer collaboration by sharing your new ideas and passion, to explore new horizons together by coming up with better solutions, and to get involved by becoming a leader in WABCE on furthering our noble mission!

I wish you all the very best and look forward to meeting you in WACBE 2015 Congress in Singapore and future WACBE congresses.
Dear Friends and Colleagues,

In a few months, the next WACBE conference will come upon us. Dr. James Goh of National University of Singapore is hard at work in organizing an exciting program for the conference which includes two plenary talks given by world renowned authorities on timely subjects. This year for the first time a Woo lecture generously sponsored by the Founding president Dr. Savio Woo and Mrs. Woo will be given. Dr. Kam Leong of Columbia University has graciously accepted our invitation to give the inaugural Woo lecture. Dr. Leong is a member of the US National Academy of Engineering and has made significant contribution to regenerative medicine with direct cellular reprogramming. The nomination committee has been working very hard trying to recruit volunteers for various activities of the society. The names of a slate of candidates for society offices have been forward to the president of the society, Dr. Zong-Ming Li. I am sure in due time many of you will hear from him urging you to cast your valuable vote to elect the next group of leaders for the society. If anyone of you is interested in volunteering your effort to serve the society, I am eager to hear from you. We especially welcome input from our female colleagues and colleagues from Europe, Australia, South America, and Africa. Look forward to seeing you all at the 2015 WACBE conference in Singapore.

MESSAGE FROM THE PAST PRESIDENT

K. Kirk SHUNG

REPORT FROM THE SECRETARY

Ming ZHANG, PhD,
The Hong Kong Polytechnic University

Our WACBE has kept growing. The registered members are more than 600, including about 340 regular members, 180 student members, and 66 life members. The geographic distribution of members is Chinese Mainland 55%, Taiwan 13%, Hong Kong 11%, USA 13%, Singapore 4%, and others from Australian, Austria, Canada, Japan, Korea, Malaysia, Nigeria and UK. If you want to join WACBE, you may download the application form http://www.wacbe.org/,(click JOIN at the up-right corner). You are particularly welcome to join as a life member. Life members are our core staff with a number of benefits, such as reduction for congress registration fee, higher priority for Congress invited keynotes and for council member election, WACBE fellow, etc. A list of our current life members is appended at the end of the newsletter.

REPORT FROM STUDENT REPRESENTATIVE

Yan WANG, The Hong Kong Polytechnic University

There are more than 180 student members, about 31 percentages of all members. For a wide geographic distribution, a net-based communicate platform QQ chat group has been developed since the council meeting at the 6th WACBE congress in Beihang University in Aug 2013. The student representative and the secretary of WACBE are the administrators and many students members are involved in daily communications.

The discussion and communication mainly includes,
- Up-to-date information of the WACBE association
- Delivering WACBE Newsletters to members
- Information of research position and opportunities
- Helping in literature downloading

- Exchanging research resource information
- Sharing photos of WACBE activities

Students and all members in biomedical engineering area over the world are encouraged to join this Tencent chat group 331044664.

The WACBE Bioengineering Interest Groups (BIGs)
Aijun WANG, UC Davis Medical Center, USA

The WACBE Bioengineering Interest Groups (BIGs) are a unique platform to engage colleagues who are passionately committed to bioengineering research and the translational applications within the Chinese biomedical engineering community worldwide. The bioengineering research is composed of a very broad spectrum of specialties and each research area can be quite distinct from each other. To further stimulate and improve more effective communication and collaboration within each specific research area, the WACBE BIGs have been recently proposed by the WACBE president, Dr. Zong-Ming Li. The newly proposed BIGs are intended to stimulate more effective and immediate innovation and collaboration by fostering thoughtful exchange of ideas, sharing available resources, and forging collaborative partnerships within a BIG and across BIGs.

The WACBE BIGs offer the opportunity to engage in lively discussions in all areas of bioengineering research, including but not limited to (1) Biomaterials, (2) Bioimaging, (3) Cell & tissue engineering, (4) Biomechanics and Mechanobiology, (5) Bioinstrumentation & devices, and (6) Neural Engineering. Each specific BIG is encouraged to organize workshops or symposia with their special research interest at a local,
The WACBE BIG Chair(s) in each specific area are also encouraged to participate in the organization of scientific sessions in the WACBE biannual congresses. These activities will immediately expand and effectively supplement the currently available WACBE activities and will increasingly improve the impact of WACBE.

Currently, Dr. Zong-Ming Li and Dr. Aijun Wang serve as the WACBE BIG chairs, working with the council and interested volunteers to form specially BIG and appoint chair(s) in specially areas. WACBE members are welcome to propose any BIG areas and organize group members and activities. We would like to have one or two BIG specialty Chairs who are enthusiastic about and dedicated to the development of this initiative.

If you are interested in working on a BIG area, please submit your proposal to awang@ucdavis.edu and liz4@ccf.org. We look forward to hearing from you.

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One of the highlights of the Congress is the Inaugural Savio Woo Distinguished Lectureship which will be given by Prof Kam W LEONG, Samuel Y. Sheng Professor, Department of Biomedical Engineering at Columbia University, USA. In addition, there will be two Invited Plenary Lectures to be given by two renowned scientists and they are Prof Hsueh-Chia CHANG, Bayer Professor of Engineering at the University of Notre Dame, USA and Prof Guang-Zhong YANG, Director of The Hamlyn Centre for Robotic Surgery at Imperial College, UK.

WACBE2015 will be held at the National University of Singapore, University Town, Town Plaza. With 12 seminar rooms and an auditorium with a seating capacity of 448, Town Plaza has the merit of having teaching facilities with retail and F&B outlets within the same compound. Please note the new deadline for submission of abstracts is 15 March 2015.

On behalf of the Organizing Committee of WACBE World Congress 2015, it gives me great pleasure to warmly welcome you and your colleagues and students to attend this World Congress. I look forward to seeing you in Singapore in 2015.

Goh Cho Hong, James  
WACBE2015 Congress Chair
中日韩 2013-2014 年度全膝关节置换
论文发表情况的比较研究
Yong Feng, MD; Guoan Li, PhD

中日韩三国同为东亚国家，历史、社会和文化背景非常相似，本文通过对中日韩三国 2013-2014 年度发表的全膝关节置换论文从数量、研究方向等方面进行了分析比较，揭示中日韩三国在全膝关节置换领域的研究现状。


在 2013 年 1 月-2014 年 11 月，全膝关节置换论文中国共发表 136 篇，其中 Review/Letter/Case report 共计 51 篇，研究论著共计 85 篇，主要研究方向集中在关节置换的生物力学/运动学、手术并发症、围手术期镇痛、骨性关节炎、临床结果等方面，共占所有论著的 53%；日本共发表 172 篇，其中 Review/Letter/Case report 共计 15 篇，研究论著共计 157 篇，主要研究方向集中在假体的对线/屈伸间隙平衡、生物力学与运动学、围手术期镇痛、手术并发症、骨性关节炎等方面，共占所有论著的 68%；韩国共发表 159 篇，其中 Review/Letter/Case report 共计 21 篇，研究论著共计 138 篇，主要研究方向集中在假体的对线/屈伸间隙平衡、临床结果、手术并发症、围手术期镇痛、关节置换术后改变等方面，共占所有论著的 66%，见图 1。

中日韩三国在全膝关节置换领域的研究方向各有侧重又有所交叉：膝关节假体的对线与屈伸间隙的平衡、关节生物力学与运动学、临床结果、围手术期镇痛和手术并发症等是目前主要的研究方向；中国与日韩之间在论著数量方面尚有一定差距。

图 1 中日韩三国 2013-2014 年度全膝关节置换论文发表情况
HONG KONG

Report from The Hong Kong Institution of Engineers – Biomedical Engineering Division
Zheng Yongping, Immediate Past Chairman of HKIE Biomedical Engineering Division, Council Member of HKIE

The Biomedical Division of the Hong Kong Institution of Engineers (HKIE-BMD) has been taking steps to promote the professionalism and enhance the capability of local engineers in biomedical engineering development. In Session 2014/15, the Division has organized various events covering a very broad topics contributing from our strategic composition of the Committee, consisting of active biomedical engineers from the medical device industry, academia, regulatory body, government and semi-government organization.

During this Session, the Biomedical Division successfully secured the government funding under the General Support Programme (GSP) of the Innovative Technology Fund (ITF), which is the first GSP approved project of the Division. The theme of this year’s GSP project is “To Promote the Application of Engineering and Technology in Medical and Healthcare”. New initiatives in research & technology and regulatory issues were introduced in order to promote biomedical engineering to young engineers, a Best Student Paper Competition and a medical software training course were also organized during the Conference. This international event attracted professionals from the international arena in the biomedical engineering field to assemble and cultivate engineering innovations.

On top of the BME2014 Conference, another flagship event was the HKIE-BMD exhibition booth in InnoCarnival 2014 from 1 November 2014 to 9 November 2014. During the InnoCarnival 2014, introduction of biomedical engineering and the contributions of biomedical engineers were showcased to the visitors in the form of exhibition boards and a newly developed digital game at the Hong Kong Science Park. The game titled “Life-sustaining Tools Developed by Biomedical Engineers” was specially developed and launched at InnoCarnival 2014 to enable the participants to have more understanding on the role of biomedical engineers. The game enabled the visitors to appreciate the innovative technologies for heart surgery that are contributed by biomedical engineers, and to arouse the interest of the public towards applying engineering knowledge on medical and healthcare applications.

The Division also proactively embarked on membership drive to engineering undergraduates via various promotional events, namely; Career Talk in CUHK for HKIE Membership Promotion; British Council Engineering Study and Careers Event. In addition, technical visits and certificated training courses were conducted, namely: Two-Day Certificated Training Course on Medical Device Clinical Trial; Overseas Training Mission on Paediatric Dermatology at Hospitals in Singapore.

In the coming years, the Biomedical Division would continue promoting the engineering practice and medical device regulation, facilitating the exchange of technologies and information in biomedical engineering, as well as strengthening the relationship amongst members and other professional institutions, to boost the development of the biomedical engineering profession in Hong Kong.

Front Row, starting 4th from Left: Ir Dr Andros CHAN (HKMHDIA), Ir Fan CHAN, JP (EMSD), Ir Victor CHEUNG (HKIE), Prof James GOH (IFMBE), Mr Joseph POON (HKPC), Dr Wai Lun CHEUNG (HA), Ir Derek LOUIE (Conference Chair & Chair of HKIE-BMD)
In December 2009, the Biomedical Engineering Society (Singapore) launched its Student Chapter. From 2011, the Student Chapter has taken over the organization of the Society’s annual local scientific meeting, resulting in a shift of emphasis towards tertiary and high school scientific research. These annual meetings have attracted about 200 participants each year. The Student Chapter also organizes annual Student Leadership Camps and Meet-the-Industry Dinners.

The Biomedical Engineering Society (BES) Industry Chapter was successfully launched in November 2011. In 2012, this Chapter organized an industry network event-cum -survey and a 3-day regulatory training session, which received overwhelming responses.

The Society has organized various conferences, including:

- The Tissue Engineering and Regenerative Medicine International Society - Asia Pacific meeting (TERMIS AP 2011), 03-05 August 2011, Singapore
- The International Congress on Advances in Citizen, Cyberspace & Environment Safety and Security 2013 (ACCESS 2013), 05-07 June 2013, Singapore
- The International Conference on Biomedical Engineering 2013 (ICBME2013), 04-07 December 2013, Singapore

The Society received an education grant in 2012 to conduct an inaugural training in Biomedical Engineering for 40 engineers/allied healthcare personnel appointed by Myanmar’s Ministry of Health in Yangon, Myanmar. This successful training was followed up with the facilitation of placing 3 of the Myanmar engineers in 3 hospitals in Singapore for one month in 2014 to enhance their training in setting up the Biomedical Engineering departments back in Myanmar upon their return.

The Society has been a gold sponsor of annual book prizes and awards for Biomedical Engineering programmes offered by several tertiary institutions in Singapore.

The Society held its first Student Design Competition in May 2014 in conjunction with its annual scientific meeting. The winner of this competition represented Singapore at the IFMBE-Sponsored Asian-Pacific Medical Device Design Competition 2014 at the 9th Asian-Pacific Conference on Medical and Biological Engineering in Tainan, Taiwan.

More forthcoming events:

**ICBP2015**

The 5th International Conference on Bio-based Polymers
24 – 27 June 2015, Singapore

**The 11th Asian Conference on Computer Aided Surgery (ACCAS2015)**
(09-11 July 2015, Singapore
(http://serve.me.nus.edu.sg/accas2015/)

**The 16th International Conference on Biomedical Engineering (ICBME2016)**
07-10 December 2016, Singapore
The 1st Global Conference on Biomedical Engineering (GCMBE 2014) in conjunction with the 9th Asian-Pacific Conference on Medical and Biological Engineering (APCMBE 2014) were successfully held by Taiwanese Association of Biomedical Engineering (TBSME) at National Cheng Kung University (NCKU), Tainan, Taiwan, from October 9 to 12, 2014. APCMBE 2014 is co-sponsored by the International Federation of Medical and Biological Engineering (IFMBE). This is the first time TBSME holds such a large scale international conference. A total of 872 delegates from 23 countries participated in this conference where 534 papers were presented. The main themes of submitted papers included Biomaterials and Tissue Engineering, Biomechanics and Computational Bioengineering, Biomedical Images and Signals, Biosensors, Medical Devices and Instrumentation, Biomedical Robotics and Surgical Technology, Neuroengineering and Rehabilitation Engineering, and other Special Topics (e.g. Clinical Engineering, Bioethics, and Biomedical Engineering Education).

During the opening ceremony hosted by Prof. Fong-Chin Su of Conference Chair, distinguishing guests, including president-elected Prof. Huey-Jen Su of National Cheng Kung University, President Ratko Magjarevic of IFMBE, President Herbert F. Voigt of International Union for Physical and Engineering Sciences in Medicine (IUPESM), director-general of the Southern Taiwan Science Park (STSP), and Chairman Frank Huang of Taiwan Medical and Biotech Industry Association (TMBIA), gave their nice words to kick off the conference. The opening plenary speech was subsequently delivered by Prof. Kai-Nan An, College of Medicine, Mayo Clinic, USA, with the topic of "Biomechanics: the Past and Future". Moreover, three plenary speeches were further presented by Prof. Ratko Magjarevic (University of Zagreb, Croatia), Prof. Herbert F. Voigt (Boston University, USA), and Prof. James Cho-Hong Goh (National University of Singapore, Singapore). Eight keynote speeches were given by Professors K. Kirk Shung (University of Southern California, USA), Ichiro Sakuma (The University of Tokyo, Japan), Shankar Krishnan (Wentworth Institute of Technology, USA), Arthur G. Erdman (University of Minnesota, USA), Cheng Dong (The Pennsylvania State University, USA), Kozaburo Hayashi (Osaka University, Japan), Zong-Ping Luo (Orthopaedic institute of Soochow University, China), and I-Ming Jou (National Cheng Kung University Medical Center, Taiwan). There are also 16 invited speakers presented topics covering all aspects of biomedical engineering. In addition to regular oral and poster sessions, many symposiums, including Dental Devices and Healthcare, Big data and Medical Informatics, 9th East Asian Consortium on Biomedical Engineering (EACBME 9), Taiwan ORS, and IFMBE Women in Biomedical Engineer, were held. Several competitions, including best papers, IFMBE young investigator competition (YIC), and especially IFMBE-sponsored Asian-Pacific Medical Device Design Competition, were also taken place. For the first time, IFMBE-sponsored Asian-Pacific Medical Device Design Competition focused the topics on the design of low-cost medical devices, in which five teams nominated by such IFMBE societies as China, Hong Kong, Korea, Singapore, and Taiwan were in the final lists. IFMBE Women in Biomedical Engineer, hosted by Prof Monique Frize with traditional Tainan cuisine, turned out to be a successful symposium that attracted nearly 100 attendees. There are more than 30 booths of exhibitions that displayed modern and innovative medical devices from local and international companies. Moreover, several important IFMBE meetings, including AC, regional Council of Society, and Asian-Pacific working group, were also held. The next APCMBE in 2017 going to Australia was voted.

APCMBE is a triennial conference held by IFMBE affiliated societies in Asia. This conference provides a great opportunity for sharing and exchanging ideas and knowledge of the latest research and developments in biomedical engineering. It brings closely together the biomedical engineers, medical practitioners, medical physicists, engineers, orthopedics, researchers, students, and communities around the world to share their latest research works and innovative developments in tissue engineering, biomaterials, biomedical images and signals, biomechanics, medical devices and instrumentation and so on. It is a great honor for TSBME to host the opportunity to host APCMBE 2014 and especially to kick off its first GCBME international conference. The success of these conferences are due to many helps from IFMBE, Asian-Pacific working group, NCKU, sponsors, and all delegates. TSBME would like to take this chance to express our gratitude for everyone and institutes who contributed to and participated in GCBME 2014 / APCMBE 2014.

The 2015 activities of TSBME mainly include professional certificate (biomedical engineer, clinical engineer, medical equipment technician) examinations, biennial conference on biomedical engineering and technologies, conferences for clinical engineering, sport activity for students of biomedical engineering departments, and forming travel groups to attend WACBE in Singapore and IFMBE World Congress in Toronto.

Report from the Taiwanese Society of Biomedical Engineering in 2014: 1st Global Conference on Biomedical Engineering (GCMBE 2014) & 9th Asian Pacific Conference on Medical and Biological Engineering (APCMBE 2014)

Shyh-Hau Wang, Secretary General, Taiwanese Society of Biomedical Engineering
Opening Address: President-elect of NCKU, Prof. Huey-Jen Su

Opening Plenary speech: Prof. Kai-Nan An, Mayo Clinic, USA

Plenary speech: President of IFMBE, Prof. Ratko Magjarevic

Ethnic Performance during the Opening Ceremony

Section of the audience during the Opening Ceremony

Dental Devices and Healthcare Symposium
With Tainan City Mayor William Lai at Welcome Reception

Photo at the Banquet

Conference Banquet, Evergreen Plaza Hotel, Tainan

IFMBE Asian-Pacific Working Group Meeting

IFMBE AC Meeting

Welcome Reception: Mayor of Tainan, William Lai, MD
JOB ANNOUNCEMENT
Contributed by Prof. Cheng-Kung Cheng, National Yang Ming University

Naton Medical Group is one of the largest orthopedic organizations in China today. Naton manufactures joint, spine and trauma implants as well as dental implants and external fixation systems from a total of six different manufacturing sites throughout China. The company was founded in 1995 to address the growing needs for orthopedic products in China and today employs over 2,000 employees and distributes its products both in China and abroad (http://english.naton.cn/).

Naton Institute of Medical Technology was formerly known as the International Orthopaedic Research Center, which was founded by Prof. Cheng-Kung Cheng in the year of 2005, currently located in Yongfeng Science Park, Haidian District, Beijing. Naton Institute of Medical Technology has been committed to work on research and development of world-class orthopaedic products.

Naton Institute of Medical Technology consists of a large number of highly educated experts and overseas returnees, over 70 percent of which are in possession of MS or PhD degrees. It has established a complete ISO 13485 standard R&D flow. From retrieval analysis to product design, from biomechanical testing to the Intellectual Property maintenance, it has already had 92 invention patents and became the Beijing Medical Implant Engineering Technology Research Center. A post-doctoral fellow working station was granted by the government most recently. Post-doctoral fellowships are opened for all implant related research scientists including biomaterials, biomechanics, medical electronics, medical imagings, and tissue engineering. If you have interest to work in the industrial R&D company in China, please contact with Co-Director Harry Dong (Harrydx@hotmail.com).
Ten Facts About Singapore
Contributed by Miss Vivian Li, a young and promising WACBE member

Have you ever been to a night zoo? How about visited the world’s tallest Ferris wheel? I have, and I have to say that the experience was amazing! Why should I go to Singapore, you might ask? Well, here are ten things that make Singapore special and unique place. You definitely don’t want to miss out!

1. **Singapore** is home to the world’s very first night zoo: The Night Safari.
2. **Singapore** has more than 3,000 kilometers of roads. Stretched end to end, they can cover the distance from Singapore to Hong Kong.
3. The tallest Ferris wheel in the world is located in **Singapore**. Its height is 165 meters, and in good weather from the top offers the stunning views of the city and this Ferris wheel can be seen from some of the islands of Indonesia and Malaysia.
4. The record for the most number of people participating in line dancing was set in **Singapore** in May 2002 with 11,967 dancers.
5. The Great **Singapore** Duck Race, an annual event that raises funds for charity, set a new world record in 2002 when more than 123,000 toy ducks took to the **Singapore** River.
6. **Singapore** has transformed itself from a third-world, swampy island to a first-class, modern city in just fifty years. It’s a regional hub for corporations, with its own high tech centers, biomedical facilities and so on.
7. **Singapore** is an extremely green city with gardens, trees and jungles everywhere. They are transforming into a “city in a garden,” a current government campaign. It’s also very clean due to its littering laws.
8. The lowest minimum recorded temperature ever is **Singapore** was 68°F and that was 80 years ago!
9. The entire lyrics of the national anthem are printed in microtext on the back of the $1,000 note.
10. Since 1905, **Singapore** has changed their time zone six times. From 1933 to 1941, the country moved their clocks forward 20 minutes for a Daylight Saving Time, but then changed it to 30 minutes. During the Japanese occupation in World War II, **Singapore**’s clocks were in sync with Tokyo—1 hour and 30 minutes ahead of the former time zone. The most recent switch in 1982 synchronized it with neighboring Malaysia as well as mainland China and Hong Kong.

Singapore is home to many amazing and wonderful things. You won’t regret visiting!

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LIST OF WACBE LIFE MEMBERS

1. CHAN Kai-Ming, The Chinese University of Hong Kong
2. CHANG Hsin-kang, City University of Hong Kong
3. CHEN Zhongping, Univ. of California, Irvine
4. CHEN Jiajin, National Cheng Kung University
5. CHEN Wei, Tian Yuan University of Technology
6. CHENG Cheng-Kung, National Yang Ming University
7. CHEUNG Tak-Man Jason, Li Ning Sports Science Research Center
8. CHIEN Shu, University of California, San Diego
9. CHING, Tak Shing, National Chi Nan University
10. CHOW Hung Kay Daniel, The Hong Kong Institute of Education
11. CHUNG Pau-Choo, Cheng-Kung University
12. FAN Yifang, Guangzhou Institute of Physical Education
13. FAN Yubo, Beihang University
14. FONG Tik-Pui Daniel, The Chinese University of Hong Kong
15. FU Bingmei, The City College of New York
16. GOH Cho-Hong James, National University of Singapore
17. GONG He, Beihang University
18. GUO X. Edward, Columbia University
19. GUO Xia, The Hong Kong Polytechnic University
20. HSIEH Adam, University of Maryland
21. HU Xiaoping, Georgia Tech & Emory University
22. JJ Julie, Indiana University-Purdue University Indianapolis
23. JU Ming-Shaung, National Cheng Kung University
24. LEE Abraham, University of California, Irvine
25. LEONG Kam W, Columbia University
26. LEUNG Kam Lun, The Hong Kong Polytechnic University
27. LI De Yu, Beihang University
28. LI Guoan, Harvard Medical School
29. LI Ke, Shandong University
30. LI Zeng Yong, Shandong University
31. LI Zong-Ming, Cleveland Clinic
32. LIANG Zhi-Pei, University of Illinois at Urbana-Champaign
33. LIM Chwee Teck, National University of Singapore
34. LIN Feng-Huei, National Taiwan University
35. LIU Yu, Shanghai University of Sports
36. LONG Mian, Institute of Mechanics, CAS
37. LU Helen H, Columbia University
38. NIU Wenxin, Tongji University
39. MAK Arthur F T, The Chinese University of Hong Kong
40. MOW Van C, Columbia University
41. QIN Ting, The Chinese University of Hong Kong
42. QIN Yi-Xian, Stony Brook University
43. SAH Robert L, University of California, San Diego
44. SHUNG K.Kirk, University of Southern California
45. SU Fong-Chin, National Cheng Kung University, Taiwan
46. SUNG Laping Am, University of California, San Diego
47. TAM Wing Cheung Eric, The Hong Kong Polytechnic University
48. TOH Siew Lok, National University of Singapore
49. TONG Kai Yu Raymond, The Chinese University of Hong Kong
50. TSUI Benjamin M W, Johns Hopkins University
51. WANG Aijun, University of California, Davis
52. WANG James HC, University of Pittsburgh
53. WANG Jaw-Lin, National Taiwan University
54. WANG Yadong, University of Pittsburgh
55. WONG Wai Hing Kenneth, Queen Mary Hospital
56. WOO Savio L-Y, University of Pittsburgh
57. YANG King H, Wayne State University
58. YANG Mo, The Hong Kong Polytechnic University
59. YANG Guangzhong, Imperial College London
60. YEN Michael, University of Memphis
61. YU Hanry, National University of Singapore
62. YUE Guang H, Cleveland Clinic Lerner College of Medicine
63. ZHANG Ming, The Hong Kong Polytechnic University
64. ZHENG Yongping, The Hong Kong Polytechnic University
65. ZHAO Chunfeng, Mayo Clinic
66. ZHU Cheng, Georgia Institute of Technology
Happy New Year