KOREAN-AMERICAN WOMEN IN SCIENCE AND ENGINEERING

KWISE NEWSLETTER

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Message from the President

Dear Fellow KWiSE Members,

Seasons Greetings! May the blessings of the season be with you throughout the New Year. I would like to congratulate and thank the Publication Committee, chaired by Prof. Hey-Kyoung Lee, for the successful revival of the KWiSE Newsletter. We are taking an ambitious step to produce the Newsletter quarterly, whereas it was published annually in the past. Frequent publication of the Newsletter will help us stay closer to the community, and it will play an important role in building a stronger organization.

Since the last Newsletter was published, the NIH (National Institutes of Health) and Southeastern Chapters had Fall Conferences. I would like to thank Drs. Hee-Yong Kim for organizing the KWiSE-NIH conference and Dr. Jae Kyung Lee for organizing the Southeastern Conference. Needless to say, a lot of you helped them to make both conferences such a success. I would also like to thank Dr. Youngjin Park for organizing a Research Triangle Park (RTP) Chapter meeting. It was a great opportunity for me to meet with institutional representatives in the area, particularly student leaders, e.g., Sally Park, KSEA-YG Duke co-president, and HaiRyung Sung, Korean Student Association President at the University of North Carolina (UNC), Chapel Hill. Following my visit to the RTP Chapter, KWiSE-RTP had a membership drive

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at the UNC Korean Association of Students and Scholars Annual General meeting.

In addition, a Mentoring Dinner "Opportunities for Students" was held at the University of Maryland. It should be noted that three Korean student organizations worked together to organize this event, namely Korean International Student Association (KISA), Korean-American Scientists and Engineers Association (KSEA), and Korean Business and Economics Student Association (KBESA). I am very proud of student leaders, particularly Haewon Han, the President of KISA and KWiSE Students Council, for leading this effort. This event was organized in collaboration with the KSEA Washington Metro Chapter and the Center for East Asian Studies. Most of the presenters were KWiSE members, and their presentation files are available on our web site: www.kwise.org.

I gave an invited talk at the 4th Korean Graduate Student Association Symposium, where graduate students in Maryland got together to present their research work. The quality of presentations was extremely high, and the topics were broad. It was an impressive student activity, and it was also good to see female speakers being awarded.

The Executive Director Dr. Eun Ju Cheong, who is also serving as the Greater DC Chapter President, and I attended the GNet-KOWST Forum 2014 (Global Network of Korean Women in Science and Technology Associations 2014) in Seoul, Republic of Korea on November 14, 2014. This forum was hosted by and organized by the Korea Federation of Women's Science & Technology Associations (KOFWST) with the theme of "Korean Women Worldwide in Science and Technology-Where we are and where we are going." It was a good opportunity for me to promote KWiSE to the global community. Representatives of the Asia-Pacific region, Canada, and the European Union also made presentations on their activities. The forum provided a great platform for global networking among Korean women scientists around the world. The Director of Women in Science, Engineering and Technology (WIEST), Dr. Heisook Lee, made a presentation on the Policy Trend. This forum was followed by the 2014 KOFWST Conference with the theme "Women Scientists and Engineers who are changing the world," which was attended by about 250 people. Both the GNet Forum and KOFWST Conference facilitated scientific interactions and added much potential for future collaborations and networking. I would like to thank the Honorable Hee-Young Paik, former Minister of Gender

Equality and Family of Korea, and the President of KOFWST for inviting us.

KOFWST and KWiSE will continue to collaborate closely and host a Women's forum at the US-Korea Conference on Science, Technology, and Entrepreneurship (UKC 2015), which will be held in Atlanta, GA, 29 July - 1 August, 2015. I hope to see many of you there.

Finally, I would like to emphasize the importance of our database, which is currently both incomplete and inaccurate. Please use the latest CV form emailed to you to update your profile. Or, visit our web site www.kwise.org, and update your profile by using "Edit My Profile. When you renew your KSEA membership at www.ksea.org make sure to choose KWiSE as an APS (Affiliated Professional Society).

Eun-Suk Seo President of KWiSE





Mentoring Dinner Report

KWiSE Mentoring Dinner "Opportunities for Students" was held at the University of Maryland College Park on October 3, 2014.











Contributed by Ms. Haewon Han, Nutrition and Food Science, University of Maryland, College Park, MD 20742

On October 3rd, 2014, the first Mentoring Dinner "Opportunities for Students" was held in the Prince George's room of the Stamp Student Union at the University of Maryland. Korean student organizations at the University of Maryland, Korean International Student Association (KISA) and Korean Business and Economics Student Association (KBESA), organized the event with the help of Korean-American Women in Science and Engineering (KWiSE), Korean-American Scientists and Engineers Association (KSEA) Washington Metro Chapter, and Center for East Asian Studies. About 60 Korean undergraduate students and Korean professionals of various fields gathered to promote Korean professional and academic networking by dining and having conversations together.

Mentors and mentees were grouped together at pre-assigned tables. Seat assignments were based on mentors' professional backgrounds and students' majors so the students could easily access mentors in their career fields of interests. The event started by introducing each mentor's name and professional affiliation. During the dinner, mentors shared their experiences with undergraduate students through stimulating conversations. These were very encouraging because students could identify themselves with mentors culturally and academically, and they realized that the professionals also had gone through many obstacles that students face today.

After dinner, speakers from various organizations introduced their organizations and presented opportunities for scholarship, awards, internships and volunteering programs. The President of KWiSE, Prof. Eun-Suk Seo, presented KSEA/KWISE/KUSCO opportunities for students. She also gave an example of internship opportunities at the University of Maryland. This was followed by Internship Opportunities at NASA presented by Ruth Cater, Advanced Concept Manager, Code 470, NASA GSFC. Dr. Myong-Hee Sung, Laboratory of Receptor Biology and Gene Expression National Cancer Institute, National Institutes of Health (NIH), presented Internship Opportunities at NIH. A Vice President of KWiSE, Dr. Hae-Young An, Deputy Director, Division of Clinical Pharmacology 3, Center for Drug Evaluation and Research, Food and Drug Administration (FDA), presented Internship Opportunities at FDA. The KWiSE Greater DC Chapter President, Dr. Eun Ju Cheong, Horticulturist, United States Department of

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Mentoring Dinner (Continued from page 3)

Agriculture (USDA), presented Internship Opportunities at USDA. Finally, Prof. Bryan Kim, Georgetown University, presented Exercise Research, Minority Health, and Cancer Prevention and Control. The Mentoring Dinner was a great success. It was a big step toward our ultimate goal to establish a strong network between undergraduate students and professionals in the Korean community for an active and effective mentorship.



GNet-KOWST Conference Report

Gnet-KOWST forum was held on November 14, 2014 in Seoul, Korea with the theme "Korean Women Worldwide in Science and Technology — Where we are and where we are going"



Four representatives from around the world (Mira Park - Prof. Univ. of Newcastle, Asia-Pacific: Resina Lee - Prof. York Univ., Canada: Mi-Young Song- Prof. CHRU Strasbourg, EU and Eun-Suk Seo, Prof. UMD, USA) gathered together with women scientists and engineers of KOFWST in Korea on Nov. 14. 2014. The forum was held to build and strengthen the networks among women scientists and engineers around the world. It was the first gathering for this purpose. Five representatives from each continent gave a talk about 'the present and future of women scientists and engineers'. Professor Seo introduced KWiSE and our roles to improve the networks and encourage the young generations in the USA. Although various supportive policies were taken, the numbers and work conditions of women in science and engineers were not improved well in Korea and also in other countries except Australia. The forum was a good opportunity to exchange opinions and introduce communities of women in science and engineers abroad. Furthermore, it expanded the networks to all over the world.

After a delicious lunch at the Global Net forum, we moved on to the grand ballroom for the Annual Conference of Korea Federation of Women's Science and Technology Association (KOFWST). The theme of the conference was 'Women

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GNet-KOWST Conference Report (Continued from page 4)







scientist and engineers lead the World'. It consisted of two plenary lectures by Dr. Sung-Mo 'Steve' Kang, President of the KAIST (Korea Advanced Institute of Science and Technology and Dr. Ivar Giaever, Chief Technology Officer of Applied BioPhysics, Inc. who won the Novel Prize in Physics in 1973, panel discussions and KOFWST Future Talent Award. The conference started with an opening remark by the KOFWST President Dr. Hee Young Paik and congratulatory remarks by several former presidents and woman politicians. Dr. Kang, President of the KAIST, spoke about the leaderships of women scientists and innovations of science with some examples from KAIST, and also raised problems that women scientists face in the real world such as gender gaps and career discontinuity due to a childbirth etc. Six panels from various fields continued in-depth discussions on these issues after the lecture. Woman scientists and engineers are still struggling in difficult times to achieve equality; nevertheless we still have a hopeful future because of young bright woman scientists. Eight beautiful scientists won the KOFWST Future Talent Award. A total of 47 women's science and technology organizations presented their achievements performed in this year. It was kind of an accidental meeting for me, although the conference was actually arranged a long time ago. It was a delightful gathering and a good opportunity to recognize that two or more is better and stronger than one.

> Contributed by Dr. Eun Ju Cheong (USDA) KWiSE Executive Director and KWiSE Greater Washington DC Chapter President



Member News Highlight

KWiSE president Professor Eun-Suk Seo makes front page on the Washington Post Magazine!

The Washington Post Magazine highlighted Prof. Seo's research with the NASA Goddard Flight Center in the November 2, 2014 issue. The magazine described her project titled ISS-CREAM (pronounced "ice cream"), which aims to study the mystery of cosmic rays.

To read the full article on-line.

 $\frac{\text{http://www.washingtonpost.com/lifestyle/magazine/u-md-goddard-programs-offer-students-out-of-this-world-opportunities/2014/10/30/2b5a170e-4a75-11e4-b72e-d60a9229cc10_story.html}$

Chapter Activities

Greater Washington DC Chapter

The Greater DC Chapter past president and the current KWiSE Publication Director Prof. Hey-Kyoung Lee was the invited speaker at the Johns Hopkins University (JHU) KSEA YG meeting on October 2, 2014. She gave a brief overview of her research on how the brain adapts to losing vision, and talked about how to prepare for graduate school. Her talk was followed by a question and answer session. Mr. Brian Myoung Hyun Choi, who is a senior in Chemical Bioengineering, is the current president of JHU KSEA YG. He organized the meeting with his cabinet members.



For more information on our activities, visit our website: www.kwise.org/east/

Los Angeles Chapter



On October 24, 2014 Dr. Jung Hee Song (President of Women in Science, Engineering and Technology in Korea) had a meeting with KWISE members including Dr. Christine Yoon (A Blessing Place), Dr. Haejung An (FDA), Dr. Jane Oh (NASA-JPL), and Dr. Hyunsook Park (CSU-LA) and discussed Korean women's leadership.

For more information on our activities, visit our website: www.kwise.org/la/

National Institutes of Health Chapter

KWISE NIH Annual meeting was held on November 22, 2014 (Saturday) from 9:45AM – 5PM at the NIH/NIAAA Conference room at Rockville, MD

The KWiSE-NIH Chapter Symposium was held in the NIH/NIAAA conference room at Rockville, MD on November 22nd, 2014. Despite the unusually cold weather, 63 scientists and 9 family members participated in the event, which ran for a full day from 9:45am to 5pm. The program was filled with many interesting sessions including a keynote address, scientific presentations, panel discussion, and extramural career advice. Participants had networking opportunities during lunch and coffee breaks.

After the welcoming and congratulatory remarks by Dr. Hee-Yong Kim (KWiSE-NIH president and the chief of Laboratory of Molecular Signaling, NIAAA) and Dr. Eun-Suk Seo (KWiSE president and the professor at the University of Maryland), Dr. Hey-Kyoung Lee (Associate Professor of Johns Hopkins University) gave her keynote address, titled "My

Chapter Activities (Continued from page 6)



journey through memory lane: How experience shapes our brain", in which she provided an inspiring presentation on her life and career journey as well as her research.

There were two scientific sessions, which were chaired by Dr. Sohyoung Kim (NCI/NIH, morning session) and Dr. Heekyong Bae (NCI/NIH, afternoon session). Eleven women scientists from different NIH institutes (NICHD, NIDDK, NHGRI, NCI, NHLBI, NIAID, and clinical center) gave brief scientific presentations on their research projects and exchanged scientific ideas.

In the Panel Discussion session moderated by Dr. Myong Hee Sung (NCI/NIH), participants had a lively discussion with 5 invited panelists – Dr. Hee-Yong Kim, Dr. Myung-Hee Park (Senior Investigator, Oral and Pharyngeal Cancer Branch,

NIDCR/NIH), Dr. Hey-Kyoung Lee, Dr. Gail Seabold (Scientific Skills Coach, Office of Intramural Training and Education, OD/NIH), and Dr. Belinda Seto, (Deputy Director, NEI/NIH). The discussion was centered around two topics of interest to many NIH women scientists: (1) Career opportunities in the age of shrinking NIH budget, and (2) Family issues arising during job search/interviews and relocation. The panelists shared their personal experiences and offered useful advice to achieve success in both career and life.

The last session of the program was devoted to the extramural career advice, and two extramural program directors – Dr. Eun-Jung Park (NIAID/NIH) and Dr. Minkyung Song (NCI/NIH) – led the session. The session was especially informative to the scientists who are interested in pursuing the career related to the extramural program as well as applying for the extramural research grants.

Overall, the 2014 KWiSE-NIH symposium was well received and turned out to be a great success, providing valuable career advice and networking opportunities among NIH women scientists.





Reported by Yoo-Ah Kim (NCBI/NLM/NIH)

For more information on our activities, visit our website: www.kwise.org/nib/

Chapter Activities (continued from page 7)

Research Triangle Park Chapter

KWISE RTP Annual meeting was held on October 21, 2014 (Tuesday) from 6:30 – 9PM at the Inter Korea House, Durham NC





RTP chapter had a good time with the KWISE headquarters (HQ) president Prof. Eun-suk Seo. She joined our meeting to greet the new members especially the undergraduate students. We had eight undergraduates, two master students, one Ph.D. student, and six professional scientists and engineers. This meeting was a start for building network between professionals and undergraduates. We had a request from undergraduates who want to have role models to develop their professional career in the future. Some of the undergraduates have not decided yet on their majors and felt a lack of finding information.

KWISE HQ president Prof. Seo suggested to them that KWISE can help to connect their mentors using KWISE members not only at the KWISE RTP chapter but also nationwide using online mentoring. She also gave a small talk about her research area on the topic of exploring the universe. In addition, she emphasized that collaborative work is very important for the big projects. Therefore networking can help proceed with the projects successful.

Contributed by Dr. Young Park

For more information on our activities, visit our website: www.kwise.org/rtp

Southeastern Chapter

KWISE Southeaster Fall Conference was held on November 8, 2014 (Saturday) at the Hyatt Place Hotel, Duluth, GA.

The Southeastern Chapter of KWISE held its fall conference at the Hyatt Place hotel in Duluth, GA, on November 8th, 2014. After inauguration in 2011, we have continuously provided an opportunity for networking, scientific presentations, and mentoring for members of the Southeastern KWiSE chapter. We also utilized this organization to share scientific research among KWiSE members and expand the networking. This time, the conference was focused on the Career Development for Academia and Government job. We had a plenary session of Dr. Seung soon Jang from GA Tech and Dr. Sohyun Park from CDC sharing their research and career development experience. For the research session, we had a research session with two outstanding trainees from Emory University and Georgia Tech. The first session was chaired by Dr. Jae-Kyung Lee (Emory University), president of the SE chapter. Dr. Seung soon Jang started the session with a presentation titled, "Computational Nano Bio Technology: the way to find treasure hidden in a field". Dr. Jang is currently an Associate Professor in School of Materials Science and Engineering at GA Tech. Along with introducing his outstanding research programs, Dr. Jang also shared his own experience in Academic faculty career for those who are

interested in their career path in Academic Institutes. Our next planetary speaker was Dr. Sohyun Park from Center for Disease Control and Preventions (CDC) talking about "Fellowship Opportunities at CDC". Dr. Park is an epidemiologist at CDC who had trained one of the prominent fellowship program called EIS (Epidemic Intelligence Service) program at CDC. Along with the EIS fellowship information, Dr. Park introduced more than 20 different fellowship programs that CDC offers.

The second research session was chaired by Dr. Sungsil Moon (CDC). Dr. Shinjeong Lee from Emory University stared the session with a presentation titled, "Therapeutic neovascularization and long-term fate of

purified endothelial cells derived from human pluripotent stem cells via a clinically compatible system". Dr. Lee is currently a postdoc fellow at Emory University and shared her valuable research project with us. The next speaker was Dr. Shinae Kim from GA Tech talking about her thesis research titled, "Microfluidic device for high throughput target elective stimulation and longterm monitoring of in vivo cells". Dr. Kim recently defended her Ph.D thesis. Her study was very impressive to move up to next career stage as a postdoc fellow position. The academic session was followed by the anther KWiSE session with the opening remarks by the chapter president, Dr. Jae-Kyung Lee from Emory University. The chapter president briefed the history and activities of the KWiSE SE chapter. The session concluded with the introduction of each member and the group photos. It is noticeable that the SE chapter adds new members every meeting with six new members joining the chapter in the fall conference. One of the features of the SE chapter is members from diverse fields of study or fields including not only basic science and engineering but also economics, epidemiology, digital media. We would like to continue and expand our networking.

Contributed by Dr. Jae Kyung Lee (Emory University) For more information on our activities, visit our website: www.kwise.org/se/









Announcements



More information at http://ukc.ksea.org/UKC2015/

2015 KWiSE Outstanding Woman Scientist Award Nomination Due: December 31, 2014

This award is to recognize member(s) who have made outstanding contributions (1) to advances in science and engineering or application of technology for the general welfare of society, (2) in fostering international cooperation especially between the US and Korea, and (3) to services for the betterment of KWiSE. Please send nomination letters to kwise@kwise.org by December 31, 2014. The candidate and the nominator are required to have an updated profile in our database. More details at www.kwise.org

KSEA Young Investigator Grant (YIG) Application due: January 1, 2015

YIG is KSEA's highest recognition given to young professionals who have demonstrated outstanding early career development in their own fields. Candidates should have a doctoral degree in science or engineering, and have been working in academia, industry, or government for no more than 6 years after the degree. Two grants (\$10,000 each) will be awarded. More details on http://ksea.org/home/?q=node/582

"Ygnite 2015"
Young Generation Technical and Leadership Conference (YGTLC)
January 23–25, 2015
Orlando, FL.



For more information: http://www.ygtlc.org/2015/

National Math and Science Competition April 18, 2015

Math competition: 3rd – 11th grade students
Science competition: 3rd – 11th grade students
Physics competition: 9th – 11th grade students\
Top three female National winners will receive the KWiSE Award. For registration, visit http://www.ksea.org/nmsc/
in February.

KWiSE East Coast Conference Save the date: May 2, 2015

The Greater DC Chapter will host the 10th KWiSE East Coast Conference on May 2 (Saturday), 2015 at the University of Maryland College Park (UMD) campus. Details will be posted soon at www.kwise.org/east/

Sponsors







