KWISE

KOREAN-AMERICAN WOMEN IN SCIENCE AND ENGINEERING'S OFFICIAL NEWSLETTER

MESSAGE FROM THE PRESIDENT

JAYOUNG KIM, PHD 8TH KWISE PRESIDENT

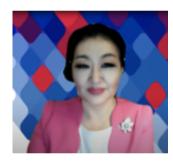
Dear Fellow KWiSE Members.

I hope you all are well and in good health. On behalf of the 8th Administration of KWiSE, I would like to extend my appreciation for you and the invaluable services you have dedicated to KWiSE. This year, I have been given the great honor of serving as President of KWiSE, the largest science society representing a diverse group of women scientists and engineers with Korean-based heritage.

Today, I had the opportunity to look back at what we together have accomplished in the recent past, since the transition of administrations amid the Covid-19 pandemic. Although it has been a historically unprecedented time and environment for us all, our members and leadership have successfully conducted several key businesses to adjust ourselves to the "new normal" era.

In December of 2020, the 1st Virtual National Annual KWiSE Conference was successfully held, with the theme of "Women Scientists in Society", addressing the importance of 'Women Scientists' taking active roles to improve society. This conference brought scientists, engineers, physicians, lawyers, and entrepreneurs to the online platform, and participants enjoyed a Keynote Talk entitled "Rejuvenation of plasticity in the adult cortex to reverse visual deficits" by Dr. Elizabeth Quinlan (University of Maryland College Park).

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Additional speakers from chapters attracted participants' great attention by giving inspiring speeches.

We hosted the KWiSE-KOFWST Women Forum, which was held at the same time as US-Korea Conference (UKC) 2020. The renowned speakers were invited to discuss the theme of "Women in STEM, the Gender Pay Gap and Broken Ladders". This forum provided opportunities for participants to discuss many hot issues including analysis of major segregation and labor market performance. Speakers from the U.S. and Korea discussed current and future challenges and opportunities to resolve gender issues in the career development of female professionals. We also had the KWiSE-KWSE Forum in Dec 2020 during UKC 2020. This virtual event was designed to provide several showcases of successful collaboration history among KWiSE and KWSE members. Several joint research projects were introduced. Investigators from the U.S. and Korea discussed current and future challenges and opportunities in their collaborative projects.



Thank you to our 2021 Annual Supporters

















As a special event, the "STEM Talk Concert" was held in December virtually. For the first series, we invited eight established medical professionals, residents, and pre-med students who shared their knowledge and experiences in medicine. With 150 young students attending the conference from both the US and Korea, we discussed the importance of the Korean American identity. A special "KWiSE Covid Forum" was held, inviting prominent professionals to learn the research status for the new norm of the Covid-19 pandemic. The Florence Nightingale Day event to celebrate the 100th birthday of Florence Nightingale was held in December. The 1st "Unni Talks" was held for young students to provide consultation and advice on various majors in STEM fields. Undergraduate students volunteered and led this half-day event. It was successful with many K-12 students virtually participating from the US and Korea. These activities are intended to strengthen our status by assisting our young people to take their place in the U.S. and to become successful Korean-Americans in the mainstream scientific community.

For the first time this year, the 2021 KWiSE-WISET Global Cross Mentoring Program was initiated at the end of April and will continue until the end of this year. There are 4 KWiSE chapters that lead this global mentoring program. I can remember how extremely proud and excited we felt watching mentors and mentees share their professional and personal knowledge with one another. Even though an online format, I was able to see the same abundant energy and passion from KWiSE mentors and chapter presidents. It is for this reason that I am confident we will continue our success stories no matter the difficulties we face in the future.

On May 1st, 2021, we held the 2nd Virtual National Annual KWiSE conference with many participants from 7 chapters. The participants' testimonials were very positive in the review of this event. After the keynote talk by the 8th KWiSE Administration and an interview with Dr. Gordon (UCLA) on diversity issues, local chapters had their own regional conferences and networking events.

to encourage young female STEM students, KWiSE set up an official collaboration with KSEA for the 2021 National Math and Science Competition (NMSC). The math competition was held in May 2021, having over 1100 participants from 23 KSEA local chapters and branches. We offered KWiSE Awards for the three female students with the top scores among 9th, 10th, and 11th-grade students.

KWiSE has long been committed to diversity and recognizes the barriers faced by women and other minorities in engaging in science. We have led and will continue to lead community efforts to engage female high school and undergraduate students in science and engineering. We organize the annual STEM Fair and Science Summer Camp, provide mentoring regularly, and facilitate career development in the STEM fields. As mentors and advisors to underrepresented groups, our efforts have been focused on better preparation of students to be active citizens in an increasingly diverse society. We would like to continue to take an active leadership role in furthering diversity. We will continue to pursue funds to run future science programs for the community activities and provide mentoring workshops from such funding for young Korean American scientists and engineers to encourage them in STEM careers. These events will also provide great opportunities for socializing and networking, and learning with one another. We thank you all for participating in our ambitious mission.

Lastly, I would like to recognize the endless support from our sponsors, partners, and supporters. I also greatly appreciate the 8th Administration, which includes the KWiSE headquarter executive committee (EC) and director committee (DC). And, as always, I am much obliged to the KWiSE Advisory Board and Chapter Presidents. As a member-driven, non-profit, ethnic professional organization, the success of KWiSE depends solely upon the volunteer time and commitment amongst our proactively participating members. Thinking of your dedicated services, I feel greatly appreciative of you all as your KWiSE President.

Thank you once again for the passion and support from all KWiSE members, and I look forward to meeting you in person soon.

Sincerely,

Jayoung Kim President of KWiSE

KWISE 8TH ADMINISTRATION



President Dr. Jayoung Kim Cedars-Sinai Medical Center, UCLA

Headquarter Officers



Vice president Dr. Mihyeon Jeon Treasurer Dr. Minhee Ko WSP USA



Doheny Eye Institute/UCLA



California State University Fullerton



ED Director Dr. Bo Young Park PR Director Dr. Sung-Sil Moon CDC



Georgia Gwinnett College



IT Director I Dr. Hyesung Park IT Director II Ms. Sohyun An



Chapter Presidents



Biola University



LA Chapter Dr. Hyuna Lee SD Chapter Dr. Mee Young Hong San Diego State University



TX Chapter Dr.Sanghee Yoo Tachyon



SE Chapter Dr.Sohyun Park CDC



DC Chapter Dr. Jinyoung Barnaby-Yang USDA



NIH Chapter Dr. Dong-Yun Kim



NY Chapter Dr. HeaYeon Lee Mara Nanotech NY Inc.

KWISE ACTIVITIES

Active engagement and interaction among KWiSE members between October 2020 to May 2021. The KWiSE HQ leads all member events were organized and brief information and flyers are included below. KWiSE chapters specific activities are organized by chapters and their detailed activity description be found under each chapter heading below in pages 8-22.

National and International Conferences

KWiSE-KOFWST Women's Forum



2020 KWiSE Annual Conference



KWiSE-KWSE Joint Forum

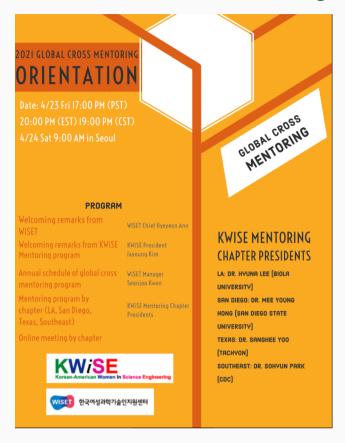


2021 KWiSE Annual Conference



The 2021 KWiSE National Annual Conference was successfully held on May 1st, on an all-virtual platform, where all KWiSE members in the US got together to communicate.

KWISE-WISET Global Cross Mentoring



2020 Florence Nightingale Day



KSEA Math Competition KWiSE Award



STEM Talk Concert





Sister Talk Youth Conference



The 2021 KWiSE Outstanding Women Scientist Award



Dr. Sung-Sil Moon (Microbiologist, CDC) from the Southeastern Chapter is the recipient of the 2021 KWiSE Outstanding Woman Scientist Award. The Award was announced at the 2021 KWiSE National Annual Conference on May 1st, 2021. The KWiSE Outstanding Woman Scientist Award is given to exceptional scientists to recognize outstanding contributions to the advancement of science and engineering and invaluable contribution to KWiSE's mission.

Korea Prime Minister's Commendation

☼ 73.85°



KWiSE former president Dr. Haejung An (FDA) was awarded by the Korean government. Congratulations, Dr. An!



KWiSE Letter to Asian-American Communities

KOREAN-AMERICAN WOMEN IN SCIENCE AND ENGINEERING

Dear KWiSE Community,

The recent horrific violence and hate crimes against Asians, Asian Americans, and Pacific Islanders have led to an increase in the fears of the Asian community around our nation. The mass shooting on Tuesday, March 16 in Atlanta, in which six of the eight people killed were Asian American women, serves as a horrific reminder of the xenophobia and misogyny rooted in our community and our nation. KWiSE sends our deepest condolences to the victims and their families.

While anti-Asian attitudes are not new, the escalation of attacks and expressions of hate and intolerance since the beginning of the pandemic have been deeply concerning. Asians, Asian Americans, and Pacific Islanders have been the targets of an alarming increase in hate incidents, from verbal slurs and harassment to physical violence.

This surge in violence comes at a time of heightened tension in America. There is no place for violence of any kind, racism, or racial prejudice. On behalf of KWISE, we condemn racism and hate, and we strive to promote equity, inclusion, and diversity. We stand with our community to help create a more equitable, safe, and thriving community for everyone.

Let us stand together in solidarity, speak out and take action to support of the Asian members of our community.

Sincerely,

Dr. Jay Kim President of KWiSE

WISET Interview "She Did It"

"She did it" is the WISET campaign to introduce expert women scientists and engineers. KWiSE former president Dr. Hye-kyung Lee has been selected for this interview.



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2007 BARBACINE DECOMP AVAIRAT

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> 이혜경 교수가 당신의 미래를 응원합니다. -"She Did it'은 더 나은 세상을 만들어나기는 이시대 여성의하기 술인을 소개하는 WISET의 캠페안입니다.



LOS ANGELES **CHAPTER**

2021 ANNUAL CONFERENCE

Time: 9AM PST, Saturday May 1, 2021

Organizers:

Hyuna Lee, Assistant Professor, Biola University So Yeon Kim, Postdoctoral Scientist, Cedar-Sinai Medical Center Sunyoung Park, Assistant Professor, Cal Lutheran University Sohyun An, Graduate Student, UCLA Boram Bang, R&D Scientist, Biotech

KWiSE National Annual Conference 2021

EQUITY, DIVERSITY, and INCLUSION

May 1 Sat., 9 AM PST





Interview with Na Young Ji, MD

In the LA Chapter Program at 10 AM

Na Young Ji, MD

Child and Adolescent Psychiatrist Autism/ADHD/Developmental Disorder Specialist Johns Hopkins School of Medicine & Kennedy Krieger Institute Faculty Medical Training received in Korea & US Inspirational Female Leader in STEM 책 [마음이 흐르는 대로]의 저자 [KBS 아침마당] 출연

YouTube [세바시] / [신사임당] 출연, 2 million views

Please come to the 2021 KWiSE National Annual Conference at 9 AM. After the Natioanl conference program, LA Chapter program starts at 10 AM with the same Zoom Link. The LA Chapter program includes the interview with Dr. Na Young JI The Los Angeles Chapter of KWiSE hosted a zoom workshop with the theme "Equity, Diversity, and Inclusion," in parallel with the headquarter' annual conference theme this year. We invited Dr. Na Young Ji, a child and adolescent psychiatrist of Kennedy Krieger Institute or Johns Hopkins School of Medicine and highly respected inspirational speaker on YouTube, to share her insights on how she reached her career at a prestigious institution in the U.S. as a woman born and raised in Korea.

Dr. Ji spoke about her experiences being a psychiatrist at Johns Hopkins, and shared about her highs and lows of her career. She shared how she became interested in her specialty autism spectrum disorder and other developmental delays. In regards to cultural bridging between Korean and American cultures and recommendations on how to raise children with a balanced Korean and American culture, she highlighted the importance of being proud of our Korean heritage and inviting others to enjoy the invaluable elements of it as well. Furthermore, it was also very helpful to hear how to confront Asian hate by asking questions to the instigator.

Because Dr. Ji requested to have the workshop in an interview format and to have it pre-recorded, it gave us the opportunity to generate a zoom background and prepare a platform for professional recording. In fact, Dr. Ji shared our recorded interview in multiple segments on her public youtube channel, which gave our chapter an opportunity to promote our endeavors worldwide





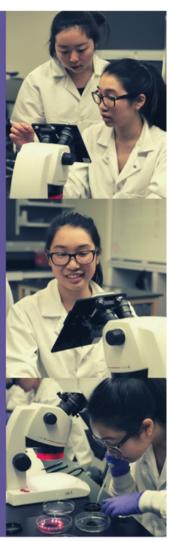


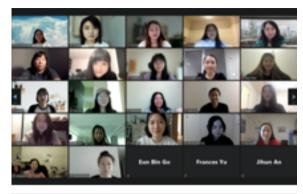
l성과학기술자협회 LA지부(회장 이현아)가 일대일 멘토링을 통한 취업 및 진로 개발, 미래설계의 지 원을 제공한다. 한국여성과학기술인지원센터(MISET·소장 안태면)의 후원으로 재미여성과기합이 기확한 글로벌 크로스 멘토링 프로그램은 미국 내 활발히 활동하고 있는 여성 연구소 과학자와 연지니어, 의사, 대

진로와 취업에 대한 관심이 높습니다

KWISE-WISET LOS ANGELES GLOBAL CROSS MENTORING







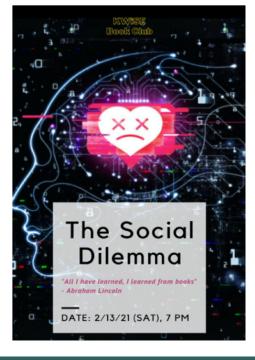




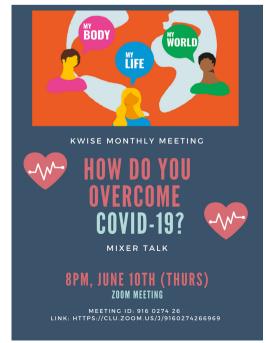
New book "Translational Urinomics" by Dr. Jayoung Kim

This book provides an overview of modern analysis of urine biomarkers for the diagnosis and prognosis of diseases related to the urinary system and the kidneys.

MONTHLY MEETINGS







SAN DIEGO CHAPTER

2021 KWISE SD CHAPTER ANNUAL CONFERENCE

One Point Lesson From You

Time: 1-3pm ET, Saturday May 1, 2021

Organizers:

Mee Young Hong, Ph.D. San Diego State University Eunjeong Yoo, Ph.D. HD Bio Wuxi Apptec Eunyung Sung, MS. Qualcomm Kiwon Park, Ph.D, Vividion Therapeutics Dajung Lee, Ph.D. Qualcomm

KWiSE-San Diego Chapter Meeting as part of KWiSE National Meeting was held on May 1st, 2021, 10 - 11:30 am at virtual Zoom platform (https://SDSU.zoom.us/j/87247211165). Chapter hosted a Speech Competition entitled "One Point Lesson From You" and five junior San Diego KWiSE members participated in the competition and a total 32 people joined the meeting.

In the meeting, we had five wonderful and insightful presentations on what are you doing for your professional career development or for a better life, or what is your strategy to deal with your stress.

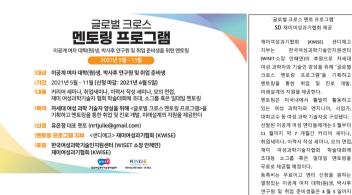
The Conference began with welcoming opening remarks from KWiSE San Diego Chapter President Dr. Mee Young Hong. Dr. Hong welcomed everyone and thanked them for their participation. Each competition participant gave a speech followed by 2-3 questions/comments and answers. After the five motivational speeches, awards were given. After the award ceremony, other members (Drs. Gye Won Han, Eunha Hoh, Minsun Baek, Heekyung Chung, and Kiwon Park) also added their life lessons. Then, participants were excited about the participation appreciation gifts. The meeting ended with Dr. EunJeong Yoo's closing remarks on thanks for the participation and wishing to stay well.

This meeting was not only educational but also provided a networking opportunity for the future leaders to communicate and network with the established American and Korean scientists in the science and technology field. This meeting promoted scientific collaboration opportunities and close networking of Korean Women in science and engineering and stimulated enthusiasm for participating in the scientific community. Participants also gain practical knowledge and new perspectives for their career development. This Meeting attracted established and young scientists and engineers in San Diego and Korea, and motivated them to participate in the KWiSE activities.



WISET-KWISE SAN DIEGO GLOBAL CROSS MENTORING

San Diego KWiSE provides WISET (Korea Center for Women in Science, Engineering and Technology)-funded "Global Cross Mentoring Program" from May, 2021 to November 2021. It consists of 10 mentors and 15 mentees from San Diego and South Korea. Mentoring program includes career seminars, resume writing, elevator speech preparation, in-person and online interview tips, personalized Q/A, etc. The mentoring program shares information and resources about career paths, provides guidance, motivation, emotional support and role modeling, and promotes networking. Article about the San Diego KWiSE Mentoring Program was pressreleased in Korean Daily Newspaper (Hankook Ilbo, March, 31, 2021).



글로벌 크로스 멘토 프로그램 SD 재미여성과기협회 제공

여성 과학자와 기술인 양성을 위해 "글로벌 크로스 멘토링 프로그램"을 기획하고 멘토링을 통한 취업 및 진로 개발, 연도성을 좋안 취급 및 전도 개념, 미래설계의 지원을 제공한다. 멘토팀은 미국내에서 활발히 활동하고 있는 여성 과학자와 엔지니어, 사업가, 대학교수 등 여성 과학 기술자로 구성됐다 선발된 이공계 여성 멘티들에게는 5 월부터 11 월까지 약 7 개월간 커리어 세미나, 취업세미나, 이력서 작성 세미나, 모의 면접, 재미 여성과학기술자협회 학술대회에 초대등 소그룹 혹은 일대일 멘토링을 무료로 제공할예정이다. 등록비는 무료이고 멘티 신청을 원하는

유은정 대표 멘토 (nrtiulie@or 연락하면 신청서 작성에 대한 안내를 받을

VIRTUAL HOLIDAY PARTY

KWiSE San Diego Chapter had a virtual Holiday Gathering on December 11th, 2020. We started the party by signing carols together. Overall activities and the results and outcomes were shared. As we are all scientists, a great discussion on safety of Covid-19 vaccines and benefits and potential risks were made. It was a great gathering to catch each other and see faces although it was through zoom. Hope everyone stays safe and healthy and the pandemic ends soon.



December 11, 6pm, Zoom MT ID: 86890675092
There will be a raffle drawing

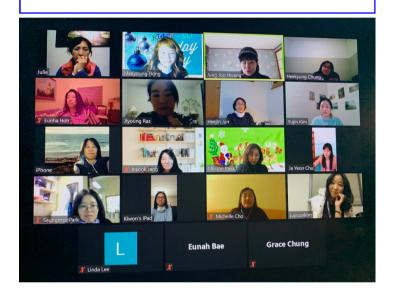


VIRTUAL SPRING SOCIAL "HOW HAVE YOU BEEN?"

KWiSE SD chapter had a virtual Spring Social under the title "How Have You Been" on February 19, 2021. It was great to meet you and catch up on our lives as colleagues and friends. We noticed some members already got vaccines and others are planning to. Experience on any side effects or advice on vaccination were shared. Thank you all for coming to the social and stay well. Hope to see you all in-person in our next meetings.

KWiSE - San Diego

Virtual Social – How have you been? February 19, 6pm, 2021



HOUSE OF KOREA AT BALBOA PARK, SAN DIEGO



House of Korea is a San Diego based nonprofit and non-political organization that fosters public learning of Korean art, culture, history and value (www.house-of-korea.org). It is located at International Cottages, Balboa Park, San Diego, CA as an associate member of the House of Pacific Relations. Dr. Jung Joo Hwang (University of California, San Diego, Calit2 i3), our San Diego KWiSE member, is the Founder and President who initiated the fund raising and made a huge contribution to build the House of Korea. With her and all volunteers' endless effort and passion, the construction of the House of Korea has been almost completed and the opening ceremony will be coming soon.

TEXAS CHAPTER

6 TH KWISE TEXAS REGIONAL CONFERENCE

Right Job? Career Showcase

Saturday May 1, 2021

Organizers:

Sanghee Yoo, Ph.D. Senior Vice President of Pharmacology, **Tachyon Therapeutics**

Soon Mi Lim, Ph.D. Assistant Professor, Texas A&M University Crystal Shin, Ph.D. Assistant Professor, Baylor College of Medicine

Yuri Park, Ph.D. Postdoctoral fellow, Baylor College of Medicine

Ju Eun Yim, Graduate student, Texas A&M University



Right job? **Career Showcase**

KWiSE TEXAS

MAY 1, 2021 (Saturday) 12:10-1:30 PM

12:10-12:30 "Immersive Simulations for Embodied Learning" by Jinsil Hwaryung Seo

12:30-01:30. Career Showcase Panel discussion

Career in visualization?



Jinsil Hwaryoung Seo, Ph.D.

Associate professor | department of visualization |soft interaction lab, Texase A&M

http://viz.arch.tamu.edu http://softinteraction.com/

http://www.embodiedimmersion.com/

Do you want academic career

Nayun Kim, Ph.D. Associate professor **UT HSC Houston**

Program Director, UT MD Anderson GSBS Program in Microbiology and Infectious Disease



Challenges women

engineer face?

How do I manage 80 engineers?

Sook Won Moon Director, Global Projects

John Crane Chemistry BS

Jiwon Lee Software Engineer Schlumberger (oil&gas)



Annual Conference was the "Career Showcase." The program was gear to help young women scientists and engineers to seek possibilities in various career paths in the STEM field. Four leading experts from different field participated in Texas regional conference. Our conference consisted of two parts - scientific and career development sessions. First, Dr. Jinsil Hwaryoung Seo (Associate professor in the department of visualization, Texas A&M) gave a talk entitled "Immersive Simulations for Embodied Learning." She introduced her exciting research projects utilizing her art and technology background. She created virtual reality (VR) environments that could enhance students' learning in anatomy and nursing, to name a few. In these interdisciplinary projects, she has collaborated with many folks from diverse field such as art, computer science, cognitive science, and education. In second part of the program, three panelists, Dr. Nayun Kim (Associate professor at the University of Texas Health and Science Center in Huston and a program director in UT MD Anderson GSBS program in Microbiology and Infectious Disease), Sook Won Moon (Director for global projects in John Crane), and Jiwon Lee (Software engineer in Schlumberger) were invited to share their story and thoughts in building their career path with Dr. Seo. They gave honest and practical advice to the next-generation women in the STEM field. They emphasized "think about yourself" when you are about to get off the ground, which means "first, you need to know what you like and what makes you happy." Dr. Kim added, "don't be scared away." In line with the national conference theme, we heard panelists' opinions on dealing with the gender biases and gaps in our work places. Some additional thoughts such as "be a good citizen.", "stay positive." and "speak up!" led to exciting discussion. Despite COVID-19 still around us, we showed our resilience and positiveness to become great women scientists and engineers in the field!

The central theme of Texas chapter program for the KWiSE National



인생 상담소 MENTOR-MENTEE CONVERSATION

What makes me "motivated"?

By Yuri Park, Ph.D. (Molecular and Cellular Biology, Baylor College of Medicine)

One of the activities we launched in the KWiSE TX chapter is "인생 상담소", where we get to know about mentors from our chapter and also the mantras that they use to keep them going. I personally find 인생상담소 very inspirationally. As a young scientist who just started a post-doctoral position, I did not have much of a clue what the next step is after completing my doctoral degree. I was seeking valuable and realistic advice from more experienced people in academia and industry to spend my postdoctoral years efficiently. 인생상담소, a mentoring session of our monthly KWiSE TX chapter meeting has given me an opportunity to identify things that make my professional path better.

What motivates me? Mentors advised me to figure out what I love the most. They commented, "you might be experiencing moments of frustration with the research process or at work. You might get demotivated from negative results in research or from bad relationships with your colleagues. If you know what you like to do and why you are doing it, it is much easier to get motivated again and move forward". With this advice from mentors, I have learned that I love to make my family feel proud of me, and this indeed motivates me to work harder and to become a better person. After realizing what I love the most, I found passion in the work I am doing!

How to succeed in the US as an Asian woman scientist? Though most Asians are hard-working, it is true that there are not many Asian-Americans in management positions. It might be due to stereotypes about Asians. One of the stereotypes is that Asians are submissive and unassuming. Many mentors in our chapter are in leadership positions in the workplace, meaning they have overcome these limitations. They mentioned, "you need to speak up whenever you encounter any issue. You also need to help others and be a good citizen, then it is going to be reciprocal." I felt this may be challenging for me to follow, being an introvert. One of the mentors said, "We do not need to change or think negatively about our stereotypes. In fact, we need someone to be calm and empathetic in leadership positions, and we are suitable for those positions." Her comments made me re-evaluate my introverted personality as a strength rather than a weakness. My mantra from 인생상담소 is "Love what I do and Be myself!"



WISE TEXAS April Zoom Meeting April 21 Wed, 2021 12-1 PM

_____ 12:00-12:20 KWiSE TEXAS 인생 상담소

4월의 주제는

" Coping with major failure?"

원하는 일이 이루어지지 않았을 때, 뜻하지 않은 어려움을 겪었을 때 어떻게 슬기롭게 극복하였는지 선배들의 실전 경험 담을 들어 봅시다.

- KWISE TEXAS

12:20-12:40

Young Scientist & Engineer Award Contestant 2



Juran Noh, PhD Candidate

Department of Materials Science and Engineering, Texas A&M University

Control of ion and electron transport in Li metal anodes for safety and high energy density

Zoom Information

Linkhttps://bcm.zoom.us/j/99157871142?pwd=QUVyZDIJeDhkMUxxRXR4Uy9yK01HZz09 Meeting ID: 991 5787 1142 Password: 389618





NEWS FROM TX CHAPTER MEMBERS

Drs. Nayun Kim, Ji Young Yoo, Hyun-Eui Kim, and Seung-Hee Yoo from UT Health received the 2021 Dean's Teaching Excellence

Congratulations on your achievement!!

2021 Dean's Teaching Excellence Award

University of Texas Health Science Center at Houston McGovern Medical School



Nayun Kim, Ph.D. Associate professor UT HSC Houston Program Director, GSBS Program in Microbiology and Infectious Disease



Ji Young Yoo, Ph.D. Assistant professor Dept of Neurosurgery



Hyun-Eui Kim, PhD Assistant Professor Department of Integrative Biology 8 Pharmacology



Seung-Hee Yoo, Ph.D. Assistant professor BCB Graduate Program

SOUTHEASTERN CHAPTER

2021 KWISE SE CHAPTER CONFERENCE & NETWORKING

Violence against Korean American women: Internal and External Violence

Time: 1-3 pm ET, Saturday, May 1, 2021

Organizers:

Sohyun Park, Ph.D., Team Lead/Lead Epidemiologist,
Centers for Disease Control and Prevention (CDC)
Hyesung Park, Ph.D., Assistant Professor, Georgia Gwinnett College
Mikyong Shin, DrPH, Epidemiologist, CDC
Sung-Sil Moon, Ph.D., Microbiologist, CDC
Mihyeon [Christy] Jeon, Ph.D., Supervising Planner/Engineer, WSP
Jae-Kyung Lee, Ph.D., Assistant Professor, University of Georgia

SOUTHEASTERN CHAPTER PROGRAM

12:00 – 1:00 PM EST National KWISE Conference

01:00 – 3:00 PM EST SOUTHEASTERN CHAPTER SEMINAR and NETWORKING

1:00 – 1:15 PM Welcoming Remarks
 KWISE SE Chapter President Dr. Sohyun Park (CDC)

1:15 – 02:00 PM EST Keynote Presentation:

Violence against Korean American women: Internal and External Violence

Dr. Yoon Joon Choi, PhD, MSW, MA
PDD Program Director & Associate Professor

Dr. Yoon Joon Choi, PhD, MSW, MA
PhD Program Director & Associate Professor
School of Social Work, University of Georgia

Dr. Choi has worked in the field of domestic violence for more than 20 years, first as a counselor/advocate for Asian immigrant women in New York City and later as a founding member of New Visions, where she oversaw the design, implementation, and evaluation of a CDC-funded prevention-focused Coordinated Community Response to domestic violence in Asian communities in Michigan. Her current research focuses on developing and evaluating an online domestic violence training curriculum for Korean American clergy.

02:00 – 3:00 PM EST Networking and Closing



The 2021 KWiSE Southeastern (SE) Chapter Regional Conference was held on Saturday, May 1, 2021, via Zoom due to the COVID-19 pandemic. The conference theme was "Equity, Diversity, and Inclusion". The organizers were Drs. Sohyun Park (Team Lead/Lead Epidemiologist, CDC), Hyesung Park (Assistant Professor, Georgia Gwinnett College), Mikyong Shin (Epidemiologist, CDC), Sung-Sil Moon (Microbiologist, CDC), Mihyeon Jeon (Supervising Planner/Engineer, WSP USA), and Jae-Kyung Lee (Assistant Professor, University of Georgia). A total of 37 members attended the meeting. The speaker was Dr. Yoon Joon Choi, a Ph.D. Program Director and Associate Professor at the School of Social Work, University of Georgia. Dr. Choi talked about "Violence Against Korea, American Women: Internal and External Violence". After her presentation and discussion, all of the members had great virtual networking time.





NEWS FROM SE CHAPTER MEMBERS

Essay book "Science Goes On" by Dr. Sung-Sil Moon 사이언스 고즈온 -바이러스와 싸우는 엄마 과학자

Dr. Sung-Sil Moon wrote a book titled "Science Goes On" (written in Korean), which was published in May 2021. Her first book, which narrates her story as a scientist, woman, mom, and foreigner, was recently published in Alma publish company, Korea.



The CDC Science Clips, Top Articles of the Week Dr. Mikyung Shin



Dr. Mikyong Shin's article entitled "Common and Unique Barriers to the Exchange of Administrative Healthcare Data in Environmental Public Health Tracking Program" was published in the Int J Environ Res Public Health in April 2021.

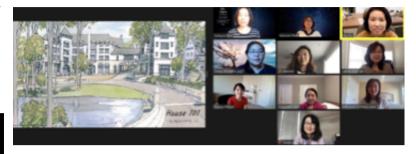
This article was highlighted in the CDC Science Clips Top Articles of the Week, which are selected on the basis of potential for population impact and practical implementation.

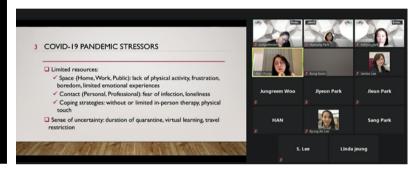
2020-2021 KWISE SE CHAPTER WEBINAR SERIES

KWiSE Southeastern (SE) Chapter has been hosting webinar series and networking meetings since November 2020. The SE Chapter hosted two webinars and networking meetings so far in addition to the 2021 Annual Conference. First webinar was held on November 14, 2020 and the speaker was Sky Ko, an Architect and President of SMK Design, LLC. Her presentation was entitled as "House 101". The second webinar was held on March 27, 2021, and the speaker was Dr. Mijin Chung, a Licensed Professional Counselor. Her talk was about "Mental health care during COVID-19". After each webinar, members had virtual great networking time.



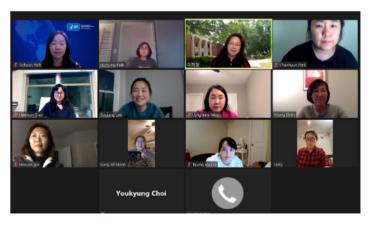






STOP ASIAN HATE CRIME

KWiSE Southeastern (SE) Chapter has been hosting webinar series and networking meetings since November 2020. The SE Chapter hosted two webinars and networking meetings so far in addition to the 2021 Annual Conference. The first webinar was held on November 14, 2020, and the speaker was Sky Ko, an Architect and President of SMK Design, LLC. Her presentation was entitled "House 101". The second webinar was held on March 27, 2021, and the speaker was Dr. Mijin Chung, a Licensed Professional Counselor. Her talk was about "Mental health care during COVID-19". After each webinar, members had a virtual great networking time.



Dr. Jae-Kyung Lee

(Assistant Professor, University of Georgia)

organized a movement on increasing awareness of the StopAsian Hate Crime campaign in Athens, GA. Dr. Jae-Kyung Lee and other Korean-American women in Athens, GA completed fundraising for the billboard campaign.



Dr. Sung-Sil Moon

wrote the column entitled "Atlanta Shooting for Asian Women; What can we do for the Asian hate crime?" in Erounnet.



NIH/DC CHAPTER

2020 FLORENCE NIGHTINGALE DAY

Date/Time:

October 24th, 2020, 1-3 PM EST, 10 AM-12 PM PST

This is a new STEM (Science, Technology, Engineering, and Mathematics) outreach activity that is initiated by KWiSE (Korean-American Women in Science and Engineering) in collaboration with ASA (American Statistical Association) and CWS (Caucus for Women in Statistics) to celebrate the 200th birth year of Florence Nightingale. Florence Nightingale is most famous for leading a team of nurses to provide medical aid to British soldiers during the Crimean War (1853-1856). However, it is much lesser known that she was also a prominent woman scientist who made a deep contribution to the field of epidemiology and statistics. In fact, she was the first woman to be elected member of the Royal Statistical Society in the UK and became an honorary member of the American Statistical Association (ASA).



Florence Nightingale Day is a worldwide outreach event organized annually by ASA (American Statistical Association) and CWS (Caucus of Women Statisticians) to educate middle and high school students and their teachers on the opportunities for a career in statistics and data science. This year marks the 200th birth year of Florence Nightingale, and KWiSE will collaborate with ASA/CWS to bring this event to the Korean-American communities in the USA. Such an event fits in with the missions of KWiSE, one of which is to educate the next generation in STEM. Data science/statistics is an essential tool for any study in the STEM field. Therefore, having such an event will allow young students, including Korean-Americans, to understand what science/statistics is and inspire and generate interest in pursuing a future career in STEM. KWiSE will organize a virtual event in collaboration with ASA/CWS to invite local middle and high school students (regardless of gender) across the United States to participate in this event.

Student Video Competition: As part of Florence Nightingale Day, KWiSE hosted a student video competition encouraging US students from grades 6-12 to submit a short video discussing some topic related to COVID-19, demonstrating their understanding of related science and statistics, and appealing to an audience of their peers.

Students Awards:

1st place:

- Jonna Chang, Marriotts Ridge High School, MD, 10th grade
- "How has COVID-19 affected the lives of the students?" https://youtu.be/ISH4YeJWLiI

2nd place:

- Kyle Kim, Scripps Ranch High School, CA, 11th grade
- Sarah Park, The Bolles School, FL, 8th grade
- "Scrutinizing the R-Naught Value and its Implication on Transmission"

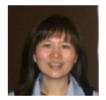
https://youtu.be/NEB4H4j57HA

Greetings:

- Dr. Ja Young Kim, KWiSE President, Professor, Cedars Sinai Medical Center UCLA
- Dr. Wendy Martinez, ASA president, Director, Mathematical Statistics Research Center, BLS
- Dr. Wendy Lou, CWS President, Professor, University of Toronto







Speakers:

Dr. Nancy Geller, Director, Office of Biostatistics Research, NIH



If You Don't Try, You'll Never Know

About Dr. Geller: Dr. Geller is the director of the Office of Biostatistics Research at the National Heart, Lung, and Blood Institute (NHLBI) and a former president of the ASA. She studied mathematics at the City College of New York, then went to Case Western Reserve University earning her master's degree and her doctorate.

She took faculty positions in statistics at the University of Rochester, the University of Pennsylvania, and the Memorial Sloan-Kettering Cancer Center before she joined the NHLBI.

About the Talk: Dr. Geller described her own experiences, both
professionally and personally in becoming a medical statistician
("biostatistician"). Her path was linear in some ways, but she
had setbacks along the way. Acquiring the confidence to
continue pursuing your goals despite setbacks is difficult, but
necessary. When opportunities arise to do something you have
never done before, it is a big plus to have a "yes I can" attitude.

2020 FLORENCE NIGHTINGALE DAY

Dr. Mimi Kim, Head of the Division of Biostatistics, Albert Einstein College of Medicine



My Career in Biostatistics: From One Plague to Another

• About Dr. Kim: Dr. Mimi Kim is a Professor in the Department of Epidemiology and Population Health at the Albert Einstein College of Medicine and has been Head of the Division of Biostatistics since 2003. Dr. a bachelor's bioengineering from UC Berkeley and a

doctorate in biostatistics from the Harvard School of Public Health. She is a Fellow of the ASA and past President of the Korean International Statistical Society.

About the Talk: In this talk, Dr. Kim shared some personal and professional experiences from her 30 year career as a biostatistician that spans from the AIDS epidemic in the 1980s to the peak of the COVID pandemic in NYC in early 2020. She also provided examples of the many research, teaching, and consulting opportunities available to biostatisticians who work at academic medical centers and discuss the training and skills needed for a successful and fulfilling career in the field.

Dr. Nicole Lazar, Professor, Penn State University



Adventures in Statistics

- About Dr. Lazar: Dr. Lazar is a Professor of Statistics at Penn State University. Before that, she was faculty at Carnegie Mellon University and the University of Georgia. She received her BA in Statistics and Psychology from Tel Aviv University, her MS in Statistics from Stanford University, and her PhD from the University of Chicago.
- · About the Talk: In the talk, Dr. Lazar shared her path to a career in statistics, with its many random twists and turns. She also talked about her experiences as a student, teacher, and collaborator with scientists.

উও Saturday 2020년 10월 3일 도요일

"나이팅게일은 데이터과학자"

24일 오후 1시 데이터과학 세미나 6~12학년 동영상 경진대회도 진행 코로나19 주제 영상 제출, 15일 마감

한인여성과학자협회(KWiSE)가 주 관하는 데이터과학 세미나가 24일 (토) 오후 1시~3시 온라인(bit.ly/ fndayregistration2020)으로 열린다.

본계학자인 나이틴게임을 기념하며 중고등학생, 학부모들에게 봉계학, 데 이터과학에 대해 알려주는 세미나다 행사는 미국 봉계학 단체인 CWS와 ASA가 공동주관하고 재미한인과학 기술자럼회와 KUSCO, 재외동포재단 이후원한다

한인여성과학자럽회 김동연 국립보 건원(NIH) 지부장은 "간호사로 널리 알려져있는 나이팅게일(사진)은 당시 통계학회 회원으로, 선구자적 통계학 논문을 다수 발표했다"며 "여성과학 자 나이팅게일을 기념하면서, 한인 학



데이터사이언스의 중요성을 알리는 행 나"라고 마이다 온라인 세미나 강 나는 총 3명이다. NIH 바이오렇게 연

구소 낸시 결러 디렉터는 바이오통계 학자의 길을 걸으면서 경험한 자부심 과 좌절, 목표를 향한 도전 등 스토리를 들려줄 예정이다.

양태트이이스타이 어려 갔더며 교수 도 자신의 경험을 말한다. UC버클리 대-하버드대 보건대학원에서 바이오 를 공부하고, 에이즈 유행, 코로나 대유 속에서 바이오봉계라 디렉터로 활 동한 이야기를 한다. 펜스테이트대학 니콜 레이저 교수는 텔아비브대-스탠 포드대-시카고대에서 통계학 전공 뒤 학생들에게 통계학을 교육하고 있는 자신의 스토리를 들려줄 예정이다 세미나와 함께 진행하는 이벤트는

생과 학부모들에게 동영상 경진대회다. 6~12학년 학생들 이 참가할 수 있다. 코로나19를 주제로 최대 3분짜리 동영상을 제작해 제출 하면 1등(300달러) 2등(200달러) 3등 (100달러) 상금과 증서를 수여한다. 웹 사이트(bit,ly/fnday2020) 참고, 마감 은 오는 15일이다.

김동연 박사는 "예를들어, 코로나19 에는 마스크를 꼭 쓰자는 데세지나 사 회적 거리두기 내용을 닦은 영상을 만 들면 된다"며 "재미있는 팩트와 통계하 적 개념을 넣어 친구들에게 알려주는 동영상*이라고 말했다.

▷문약 FN,KWISE@gmail.com 심재훈기자

• Dr. Yangjin Bae, Professor, Baylor College of Medicine · Dr. Jinyoung Barnaby, Research Plant Physiologist, USDA

Florence Nightingale Day 2020 Organizing Committee

• Dr. Mee Young Hong, Professor, San Diego State University

Chair: Dr. Dong-Yun Kim, Mathematical Statistician, NHLBI/NIH

- Dr. Mihyeon Jeon, Transportation Engineer, WSP, USA
- Dr. Sun Jung Kang, Mathematical Statistician, NIMH, NIH
- Dr. Hey-Kyoung Lee, Professor, Johns Hopkins University
- Dr. HeaYeon Lee, CEO, Mara Nano Tech, NY Inc
- · Dr. Ji Hyun Lee, Imaging Lead, NIAID, NIH
- Dr. Jungwha Lee, Professor, Northwestern University
- Dr. Suhwon Lee, Professor, University of Missouri
- Dr. Jiyoon Yoon, Professor, University of Texas

Statistics:

• 223 registered

Committee members:

- 84% students, 16% not students
- 188 middle/high schoolers, 18% of which participated in the student video competition
- · Around 10% of participants from South Korea

Sponsors:

- · Overseas Korean Foundation
- Korea-US Science Cooperation Center (KUSCO)
- Korean-American Scientists and Engineers Association (KSEA)
- · Embassy of the Republic of Korea in the USA

Hosted by KWiSE, In collaboration with ASA and CWS.

ADDRESSING WHAT NEEDS TO BE DONE



The KWiSE NIH chapter recently met virtually with AAPI leaders from several groups within NIH. In that meeting, we discussed the shared experiences that impact Asian Americans and explored ways to bring awareness to NIH leaders and the community while simultaneously supporting our colleagues. We are scientists by profession, but we are also proud Koreans by heritage. Science and its progress are fundamentally driven by diversity and the great minds that are born across all ethnicities and cultures. However, the rise in anti-Asian hate, as well as the generally pervasive racial inequality prevalent in the US, is deeply concerning, and we must speak louder. It is paramount that we address these inequalities professionally and personally. To achieve these goals, a Federated AAPI Network (FAN) was created as a voice for the larger AAPI community at NIH, of which the KWiSE NIH chapter will take an active role. We are proud to work with the diverse, inspiring groups within NIH and hope to work together towards these goals of dispelling inequities in our community.

2021 KWSE-KWISE VIRTUAL SEMINAR

The NIH and Washington DC chapters of the Korean-American Women in Science and Engineering (KWiSE) in collaboration with Korean Women in Science and Engineering (KWSE) is holding biweekly webinar series in the fields of life science (2nd Tuesday at 9 pm EST/Wednesday 10 am Korea), data science and Ecoscience (4th Tuesday at 9 pm EST/Wednesday 10 am Korea). The purpose of this webinar series is to promote scientific collaborations between Korea and the United States.

http://kwse.or.kr/kor/board/webinar/webinar_info.jsp

KWSE-KWiSE Joint Web-Seminar 2021 여성과학자 웨비나



Bioscience

매월 둘째주 수요일 10:00 (KST 기준) / 매월 둘째주 화요일 20:00 (서머타임 21:00_EST 기준)

KOR 02.10 / USA 02.09 February



이재선 인하대학교 Understanding of Therapy-Induced Premature Senescence in Tumor Microenvironment

신청

May

March

문성실 CDC Inactivated Rotavirus and Poliovirus Vaccines Co-administered with a Microneedle Patch Produce Robust Immune Response in Animal

KOR 03.10 / USA 03.09

KOR 05.12 / USA 05.11

KOR 07.14 / USA 07.13

송민교 NIH / NCI

KOR 09.08 / USA 09.07

임순미 Texas A&M University

Biomedical Applications of

Synthetic Polymers

KOR 10.13 / USA 10.12

Carcinogenesis

nmunoepidemiology in

KOR 04.14 / USA 04.13 April



이혜옥 가톨릭대학교 **Exploring Cancer with Single Cell RNA Sequencing**



July

강선정 NIH / NIMH Collaborative Research on Mobile Technology

KOR 06.09 / USA 06.08 June



서행란 한국파스퇴르연구소 Identification of Hepatic Fibrosis Inhibitors through Morphometry Analysis of Hepatic Multicellular Spheroids Models

KOR 08.11 / USA 08.10 August



김미영 한국과학기술원 Investigating Metastatic Cancer Cell-Tumor Microenvironment

October



김남순 한국생명공학연구원 Metabolism and Cancer Reduction of Squalene Enoxidase by Cholesterol Accumulation Accelerates Colorectal Cancer Progression and Metastasis

KOR 11.10 / USA 11.09 November



최지연 NIH / NCI and Geneti Genetic Susceptibility to Lung

September

이영주 동국대학교 n and Cancer Effect of Hypoxia on Estrogen Receptor Phosphorylation

김정애 한국생명공학연구원 kim@kribb.re.kr

이지현 NIH / NIAID jihyun.lee@nih.gov

KWSE-KWiSE Joint Web-Seminar 2021 여성과학자 웨비나



Ecoscience & Data Science

매월 넷째주 수요일 10:00 (KST 기준) / 매월 넷째주 화요일 20:00 (서머타일 21:00 EST 기준)

KOR 02:24 / USA 02:23 February



Lewis Ziska Columbia Univ. Climate Change and Public Health Through a Botanical Lens.



March

차미영 한국과학기술원 Applied Machine Learning Unveiling North Korea's Local Economic Development via supervised Deep Learning on Satellite Imagery

KOR 03 24 / USA 03 23

April KOR 04.28 / USA 04.27



박정미 한국생명공한연구원 Molecular Plant-Microbe Interactions A Human Pathogenic Bacterium Shigella Proliferates in Plants through Adoption of Type III Effectors for Shigellosis



July

May

성희종 NIH / NIMH Genomic Database for

KOR 07.28 / USA 07.27

KOR 07.28 / USA 07.27

KOR 09.29 / USA 09.28

Applied Machine Learning

김진아 한국해양과학기술원

Deep Learning for Earth System

nce (El Nino Forecasting)

KOR 05.26 / USA 05.25

KOR 06.23 / USA 06.22 June



한은진 Columbia Univ. Advances in Climate Services for Agriculture: from Generation to Use



이선경 한국화학연구원 Data Bank

Chemical & Data Platform for Drug Discovery at Korea Chemical Bank

August KOR 8,25 / USA 8,24



정진영 한국생명공학연구원 **Biodistribution and Biological Effect** of Nano/Microplastics



September

July

김성환 NIH / NLM Data Bank PubChem: a Public Chemical Information Resource for Big Data Chemistry

August KOR 8.25 / USA 8.24



양진영 USDA Climate Change Understanding Genetics x Environment x Managem Interactions through High-Throughout Omics-Driven Techn Sustainable Agriculture

※ 추성 연호로 위해 다섯째주 수요입(하군)/하요입(미군)에 지해

KOR 10.27 / USA 10.26 October



하경자 부산대학교



November

김동연 NIH / NHLBI NIH Data Resources

KOR 11.24 / USA 11.23

정진영 한국생명공학연구원 ivieong@kribb.re.kr

양진영 USAD Jinyoung.Barnaby@usda.gov 박진아 한국과학기술원 jinahpark@kaist.ac.kr

김동연 NIH / NHLBI dong-yun.kim@nih.gov

문의처 KWSE 사무국 | E. yjmin@kwse.or.kr | T. 042-863-8318









KWISE FORUM SERIES "COVID-19"

COVID-19 Research in the US and South Korea

Date/Time: US: December 3rd, 2020, 7-8:30 PM EST Korea: December 4th, 2020, 9-10:30 AM KST

Speakers:

Dr. Youngmee Jee, CEO at Institut Pasteur Korea

- Talk Title: Infectious Disease R&D in Korea: The Role of Science Amid COVID-19 and Beyond
- About Dr. Jee: Dr. Youngmee Jee is currently the CEO of Institut Pasteur Korea, which is an international research institute focused on addressing global health issues with cutting edge approaches to understand disease mechanisms and treatment development. Dr. Jee has broad experience in collaborating with WHO and other international public health partners-she is a member of WHO's International Health Regulation Emergency Committee on COVID-19 as well as WHO's Scientific Advisory Group for the Blueprint on R&D Preparedness for Epidemics. She received her MD from Seoul National University Medical School in 1986, and her PhD in Virology from the University of London in 1997.
- About the Talk: Dr. Jee talks about how research and
 development in Korea has responded to emergencies from
 infectious disease as well as national plans in place for these
 kinds of unpredictable health crises. In addition, she discusses
 what Korea has done to combat COVID-19 in terms of vaccine
 research, therapeutics, and medical equipment as well as how
 Korea plans to move forward with national COVID-19 guidance
 as novel findings from epidemiological studies occur.

 ${f Dr.}$ Connie Schmaljohn, Director of the Integrated Research Facility, NIAID

- Talk Title: COVID-19 studies at the NIAID Integrated Research Facility (IRF-Frederick)
- About Dr. Schmaljohn: Dr. Schmaljohn is the Director of the Integrated Research Facility in Frederick, MD, National Institute of Allergy and Infectious Diseases, NIH. She has served as president of the International Society of Hantaviruses and was Chair of the American Society for Microbiology Biodefense Conference as well as the International Committee on the Taxonomy of Viruses Bunyaviridae Study Group. She has received the Order of Military Merit in 2002, the Association of Military Surgeons of the US Research Award in 2002, and the Presidential Rank Award in 2017. She has also published more than 200 peerreviewed journal articles and reference works. She earned her Ph.D. in Virology from Colorado State University.
- About the Talk: The Integrated Research Facility in Frederick,
 MD is part of the Division of Clinical Research at NIAID. Its
 mission is to manage, coordinate, and facilitate the conduct of
 emerging infectious diseases and biodefense research. In
 response to the COVID-19 pandemic, the IRF-Frederick has
 focused studies on developing models and assays to assess
 medical countermeasures to combat SARS-CoV-2 infections.



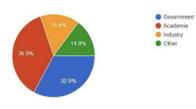


Program Chair: Dr. Ji Hyun Lee, Imaging Lead at NIAID Moderator: Dr. Eun-Chung Park, Program Officer at NIAID

Stats:

149 registered 33% from South Korea, 67% from USA Affiliation Chart:

Affiliation



This forum was hosted by KWiSE NIH/DC chapter and sponsored by Korea Foundation.

The forum was featured in a Korea Daily newspaper publication on November 18th, 2020.

여성과학자협회, 코로나19 포럼

12월 3일 오후 7시 세계보건기구 코로나19 위원 지영미 박사 등 강연



여성과학자협회 가 오는 12월 3일 오후 7시 코로나 19를 주제로 온라 인 포럼을 한다. 세계보건기구

(WHO) 코로나19

긴급위원회 위원인 지영미 박사(사 진)가 강사로 나선다. 지 박사는 서울 대외대와 영국 런던대 졸업 뒤 대한 민국 질병관리본부에 들어갔다. 질병관리본부 소화기 바이러스과 장, 면역병리센터장 등을 역임했고

소아마비 박멸 사업 업적을 인정받 아 2007~2014년 WHO 예방접종프 로그램지역조정관을 맡기도했다.



포럼에는 국제 한타바이러스 학 회장을 맡고 있는 코니 시말은 박사 도 강사로 나선다. 네브래스카다학 과 골로라도주답대에서 미생물학과 바이러스학을 전공한 시밀은 박사 는 미국 미생물학회, 국제 백신학회 인원 등으로 활동했다.

임편 등으로 활동했다. ▷등록: Bit.ly/kwiseforum2020 심재훈기자

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KWISE FORUM SERIES "COVID-19"

Title: New Technologies in COVID-19 Diagnostics

Date/Time:

US: March 25th, 2021, 8:30-10 PM EST Korea: March 26th, 2021, 9:30-11 AM KST

Speakers:

Dr. Tae Seok Seo, Professor at Kyung Hee University

- Talk Title: Point-Of-Care Genetic Diagnostic Platform for COVID-19 Identification
- About Dr. Seo: Dr. Seo is a professor in the Department of Chemical Engineering at Kyung Hee University. He earned a Ph.D. in Chemical Engineering at Columbia University in 2004. Since 2005, he has performed postdoctoral research on the micro-total-analysis system at UC Berkeley under the guidance of Dr. Richard Mathies. His major projects are involved in the construction of a total integrated portable microsystem for genetic analysis, high-throughput biomimetic cell-based assays, next-generation biosensors, and nanoscale chemical synthesis. He holds 115 international papers, 48 patents, 48 awards, and 6 technology transfers.
- About the Talk: In the midst of COVID-19, molecular diagnostic technology plays a major role to prevent its spread. The conventional genetic analysis process requires a prolonged reaction time, a series of analytical steps, bulky and expensive instrumentation, and lack of point-of-care(POC) testing. Dr. Seo introduces an advanced portable genetic analyzer based on a fully integrated centrifugal microsystem for on-site COVID-19 identification. The whole process from the sample injection to the data analysis was completed in an hour and 10 samples could be automatically analyzed at one time.

Dr. Clare Fasching, Senior Manager of Clinical and Assay R&D team at Mammoth Biosciences

- **Talk Title:** Rapid Development of a SARS-CoV-2 CRISPR Diagnostic
- About Dr. Fasching: Dr. Fasching's early career focused on cancer research; she completed a PhD at Children's Medical Research Institute through the University of Sydney where she studied the Alternative Lengthening of Telomeres (ALT) pathway. After a postdoctoral fellowship at the University of California, Davis, she joined Telomere Diagnostics, Inc. where she led the development of a direct-to-consumer sample collection kit for telomere length measurement and transferred it into the CLIA laboratory environment. She currently leads the Clinical and Assay R&D team at Mammoth Biosciences, where she and her team focus on developing sample preparation technologies and adapting new CrISPR assays into diagnostics using clinical samples.
- About the Talk: CRISPR is most commonly associated with gene editing using the cas 9 protein. New CRISPR systems have been identified using alternative cas proteins targeting DNA or RNA. These systems have been shown to exhibit nonspecific trans-nuclease activities when bound to their respective targets. Dr. Fasching's team, among others, have leveraged these activities to create simple, rapid, sensitive, and inexpensive diagnostic technologies. In response to the emergence of the SARS-CoV-2 late





in 2019, Dr. Fasching and her team turned their versatile technology towards developing a COVID-19 diagnostic assay. During the past year, they have established a reagent set using their original assay design and further applied it towards additional projects to expand their diagnostic capabilities for the detection of SARS-CoV-2.

Program Chair and Moderator: Dr. Eun-Chung Park, Program Officer at NIAID

Stats:

- · 168 registered
- 41% from South Korea, 56% from US, 3% from elsewhere

Affiliation 168 responses Government Academia Industry Other 34.5%

The forum was featured in a Korea Daily newspaper publication on March 14th, 2021

여성과학자협회 포럼

25일 오후 8시 30분 '코로나 진단 기술' 주제

한미여성과학자협회가 25일(목) 오 후 8시 30분 '새로운 코로나 진단 기 술'을 주제로 온라인 포럼을 연다.

강사는 서태석 경희대 화학공학 과 교수다. 서 교수는 서울대학교 화학공학과를 졸업하고 카이스트 석사, 콜럼비아대에서 화학공학 박 사학위를 받았다. UC버클리에서 포스닥과정을 마친뒤 유전자 분석 을위한 마이크로시스템, 차세대 바 이오센서 등을 연구했다.

맘모스바이오사이언스의 클래어 패칭 시니어 매니저도 강의한다. 클 래어는 시드니대 어린이 의학 연구 소에서 박사학위를 받고 캘리포니 아대학에서 생화학 포스닥 과정을 마쳤다. 세포의 수명을 결정짓는 연 생제 끝부분 '벨로미어' 길이를 축 정하는 키트 등을 여구했다.

한미여성과학자협회는 한국계 미 국인 여성 과학자들로 구성된 비영



리단제다. 여성 과학기술인 네트워 크 구축 및 강화, 경력개발 기회 제 공, 한-미 국제협력 증진 등을 목표 토 하고 있다. 여성과학자들의 과학 저널 작성, 채용 지원, 여성과학자 포럼 등을 개최하고 있다.

▷등록 bit.ly/kwiseforum2

심재훈기

NEW YORK/ NEW JERSEY CHAPTER

2021 KWISE NY/NJ CHAPTER CONFERENCE

Health and Welfare in Covid Era

Time: 9:00 am - 12:00 pm ET, Saturday May 29, 2021

Organizers:

HeaYeon Lee, Ph.D. Founder/CEO of Mara Nanotech New York, Inc. Sung Eun Choi, Ph.D., RD: Associate Professor, Queens College Yeon Bai, Ph.D., RD: Professor, Montclair State University Hyunah Cho, Ph.D.: Assistant Professor, Fairleigh Dickinson University

Meeting Schedule:

09:00-09:20 Greetings/Opening Remarks,

Dr. HeaYeon Lee, Chapter President

09:20-10:20 Member Introduction: Round Table-Self Introduction

10:20-10:40 Dr. Tsz Chung Lai

Abuse-Deterrent Formulations of Opioids

10:40-11:00 Dr. Jong Min Lee

East Asian international students' perceptions,

attitudes, and behaviors in relation to U.S food and

the food environment

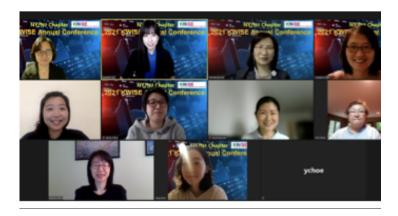
11:00-11:20 Dr. Hyunah Cho

The big world of the small: into the nano era of drug

delivery

11:20-11:30 Discussions

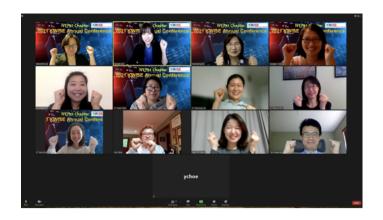
11:30-12:00 Closing Remark



The 2021 KWiSE New York/New Jersey Chapter Regional Conference was held on Saturday, the 29th of May, 2021 via Zoom. Under the theme of "Health and Welfare in COVID era", this year's conference featured three scholars from pharmaceutical industry, nutrition and food sciences, and pharmaceutical sciences. This event was organized by HeaYeon Lee (Founder/CEO of Mara Nanotech New York, Inc.), Sung Eun Choi (Associate Professor, Queens College), Yeon Bai (Professor, Montclair State University) and Hyunah Cho (Assistant Professor, Fairleigh Dickinson University). A total of 12 members/speakers were in attendance.

This year's conference started with greetings of the Chapter President Dr. HeaYeon Lee. In her greetings, she thanked KWiSE New York/New Jersey Chapter members joining this virtual event for the pursuit of both personal and professional excellence and resilience. Next, members had the time to introduce themselves and share any updates on both their personal and professional lives. Each member shared their personal/professional experiences and lessons learned at this challenging time during COVID pandemic.

Then, the three speakers took turns to present on topics of their specialties. The first speaker was Dr. Tsz Chung Lai, a Senior Principal Scientist, Bristol Myers Squibb. His talk was titled "Abuse-Deterrent Formulations of Opioids". Dr. Lai discussed the recent trends/opioid-related overdose issues, abuse-deterrent technologies, mechanisms of deterrence, and clinical data from pharmacokinetic or human abuse potential studies. The second speaker was Dr. Jong Min Lee, an adjunct professor in nutrition at Montclair State University. Her talk was titled "East Asian international students' perceptions, attitudes, and behaviors in relation to U.S food and the food environment". Dr. Lee reviewed and discussed her recent study that focuses on East Asian international students' changes in eating habits since coming to the U.S. (New York), the reasons for the changes, and how they perceive the U.S. food environment. The third speaker was Dr. Hyunah Cho, an assistant professor of Pharmaceutical Sciences, School of Pharmacy and Health Sciences, Fairleigh Dickinson University. Her talk was titled "The big world of the small: into the nano era of drug delivery". Dr. Cho summarized some of her research projects associated with nano-based drug delivery systems including polymeric micelles, nanogels and nanodiscs.



These drug delivery systems were utilized to deliver poorly water-soluble drugs and/or imaging agents to the patients in controlled and safe manners. In the first 5 min, each speaker talked about their career path. After each talk, members had opportunities to ask questions and share their thoughts.

After the three presentations and discussions, the 2021 annual conferences ended with the closing remark given by the Chapter President Dr. HeaYeon Lee. It was a great success and a smooth event with active discussions and open conversations. The presentations were high in quality and covered the various aspects of health and welfare. It provided meaningful opportunities to catch up and share personal and professional experiences at this challenging time.









The big world of the small:
Into the nano era of drug delivery

Hyunah Cho, Ph.D.

Assistant Professor of Pharmacoutical Sciences
School of Pharmacoy and Health Sciences
Flaitleigh Dickinson University



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KWiSE (Korean Women in Science and Engineering) is a non-profit organization of Korean-American women professionals in science and engineering. We offer members networking, career development, and mentoring for junior members and provide opportunities for collaborations. We promote international cooperation, especially between the United States and Korea.



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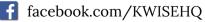
Most Science, Technology, Engineering & Mathematics (STEM) fields have seen growth in women over the years; however, there are still problems.

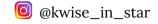
- While the ratio of women in Biological Sciences and Mathematics is close to 50%, there is a considerably lower proportion of women in higher-level positions. This is called the "leaky pipeline" or the "glass ceiling" problem.
- In Physical Sciences, Computer/Information Technology, and Engineering, the ratio of women is only about a quarter, which indicates a severe problem of recruitment into those fields of study.
- The proportion of Asian-Americans in leadership positions in STEM-related academia, government, and industry jobs are disproportionally low compared to other races. This is called the "bamboo ceiling" problem. In particular, Asian American Women show the lowest percentage in promotion in all STEM-related jobs. KWiSE aims to help address & solve these issues.

Together, we can make a difference!



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