재미한인과학기술자협회
KSEA
Korean-American Scientists and Engineers Association

재미한인과학기술자협회

http://www.ksea.org

Eun-Suk Seo, Ph.D.
Professor of Physics, University of Maryland
President, KSEA Washington Metro Chapter
President, KWISE

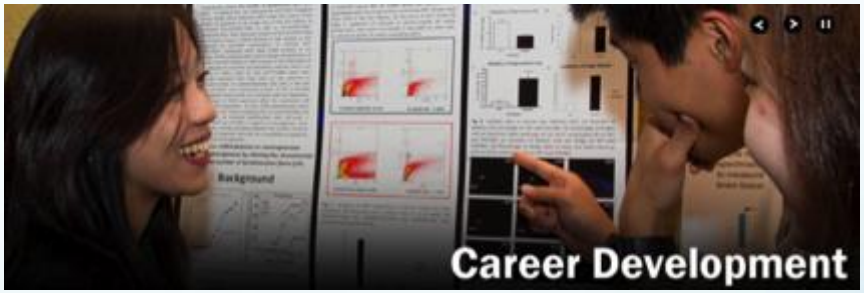
KSEA

- **KSEA was established in 1971 as a non-profit professional organization and has grown to over 3000 registered members with 67 local Chapters and 13 technical groups across the United States**

KSEA Mission

Provide opportunities for:

- US-Korea Cooperation
- Career Development
- Community Participation
- Professional Networking
- Technical Excellence



KSEA Vision

Become a premier association with the following Business Plan:

- **Promote the application of science and technology for the general welfare of society**
- **Foster international cooperation especially b/w the U.S. and Korea**
- **Serve the majority of ethnic Korean scientists and engineers in the US to help them develop their full career potential**

Membership Benefits

Scholarships

- For Undergraduate & Graduate Students in the U.S.
- ~50 recipients per year

Scholarship Examples

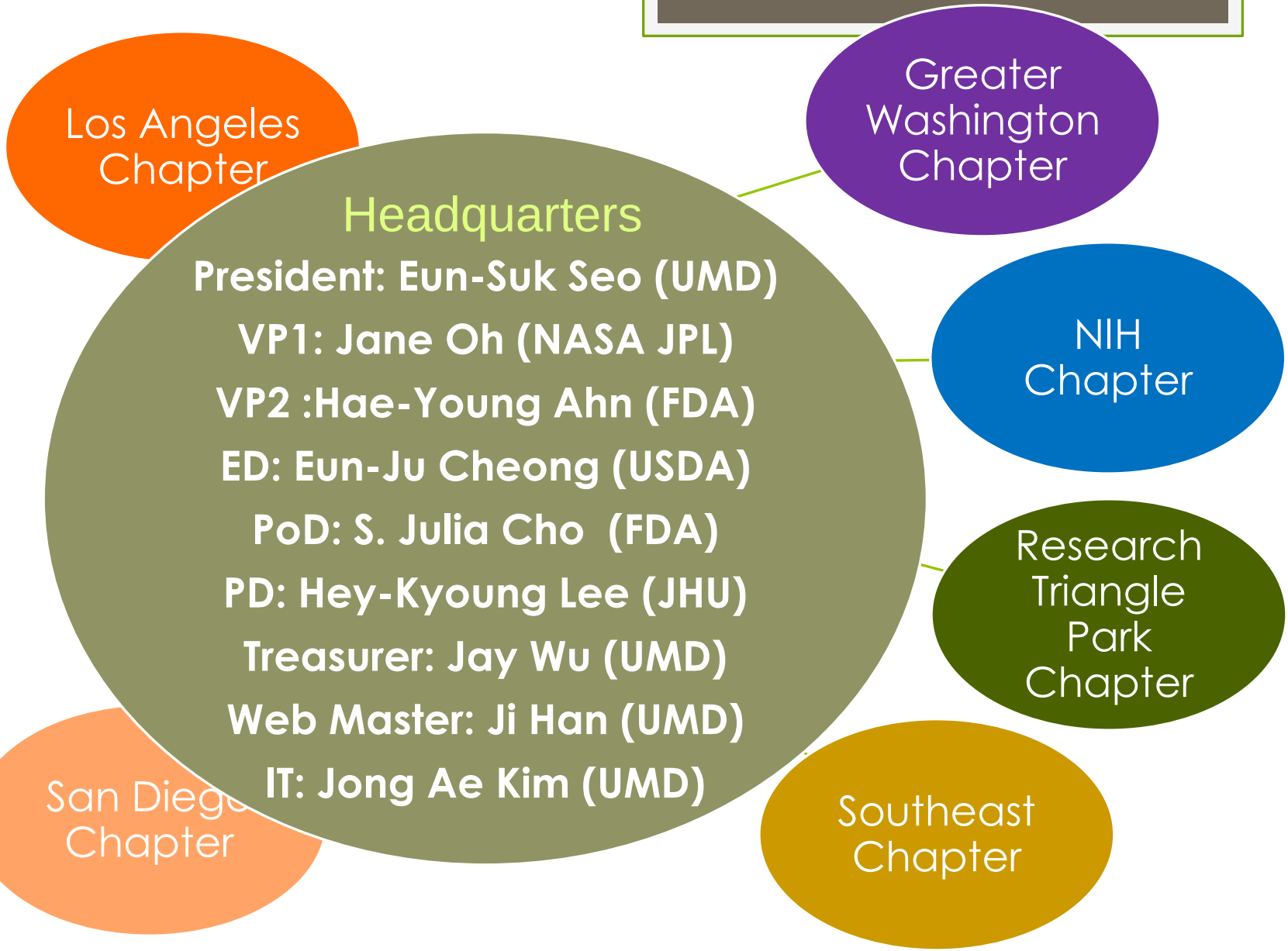
- KSEA Scholarship (multiple), $1,000
- Inyong Ham Scholarship, $1,000
- Hyundai Scholarship (2), $1,000
- Chunghi Hong Park Scholarship (2), $1,000
- Yohan and Rumie Cho Scholarship (1), $1,000
- Shoon Kyung Kim Scholarship (1), $1,000
- Nam Sook and Je Hyun Kim Scholarship (1), $1,000
- Changkiu Riew and Hyunsoo Kim Scholarship (1), $1,000
- KUSCO Grad Scholarship, multiple

Happy Family, Happy Career

KWiSE

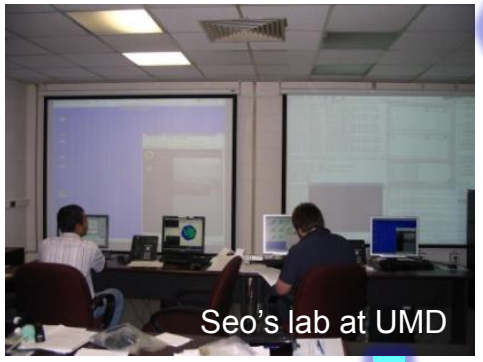
Korean-American Women in Science and Engineering

http://www.KWISE.org

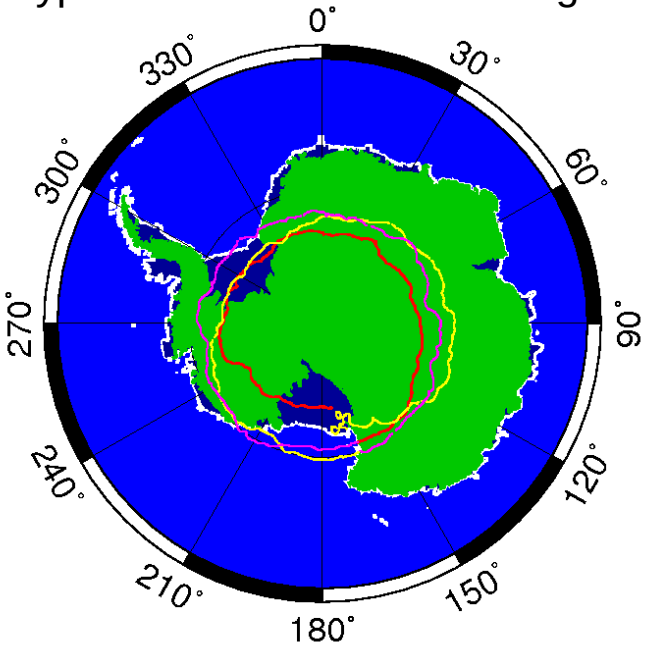

Los Angeles Chapter
Greater Washington Chapter
Headquarters
President: Eun-Suk Seo (UMD)
VP1: Jane Oh (NASA JPL)
VP2 :Hae-Young Ahn (FDA)
ED: Eun-Ju Cheong (USDA)
PoD: S. Julia Cho (FDA)
PD: Hey-Kyoung Lee (JHU)
Treasurer: Jay Wu (UMD)
Web Master: Ji Han (UMD)
IT: Jong Ae Kim (UMD)
NIH Chapter
Research Triangle Park Chapter
San Diego Chapter
Southeast Chapter

Balloon Flights in Antarctica Offer Hands-On Experience

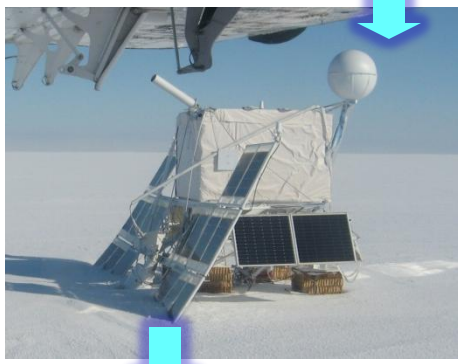
CREAM has produced >12 Ph.D.'s



Typical duration: ~1 month/flight



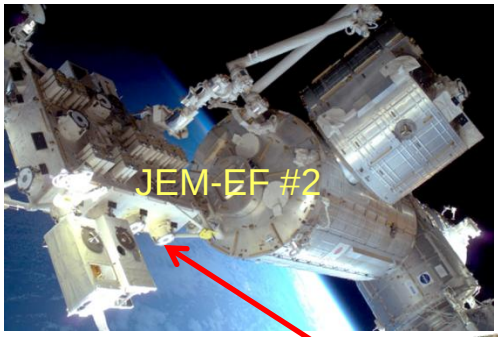
The instruments are for the most part **built in-house by students** and young scientists, many of them currently working in the on-campus laboratory.



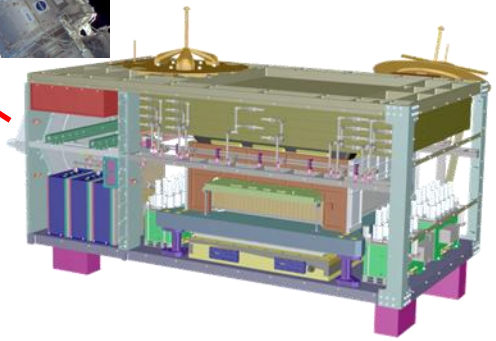
Instruments are fully recovered, refurbished & reflown.

ISS-CREAM: CREAM for the ISS

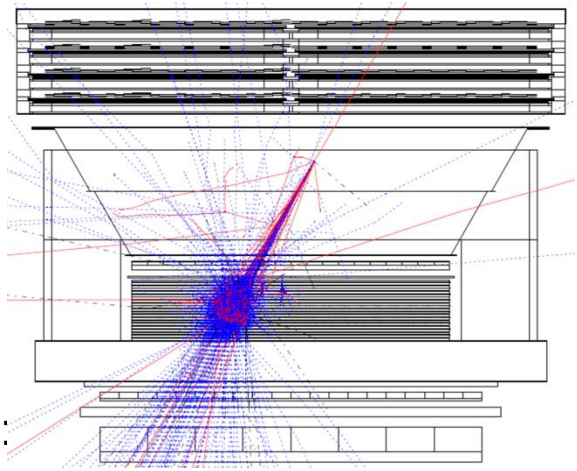
E. S. Seo et al, Advances in Space Research, **53**/10, *1451*, 2014



To be installed on the ISS
in 2015 by Space X-6
http://cosmicray.umd.edu



Mass: ~1400 kg
Power: ~ 550 W
Nominal data rate:
~350 kbps



- Building on the success of the balloon flights, the payload is being transformed for accommodation on the ISS (NASA's share of JEM-EF).
  - Increase the exposure by an order of magnitude
- ISS-CREAM will measure cosmic ray energy spectra from 10^{12} to >10^{15} eV with individual element precision over the range from protons to iron to:
  - Probe cosmic ray origin, acceleration and propagation.
  - Search for spectral features from nearby/young sources, acceleration effects, or propagation history.


Calibration of Calorimeter for CREAM Experiment
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DO NOT


NIKE


VA00207