





## News and Announcements



Shu Yang in New York City.Groomer: Kenta Koda; Contributing Visual Direction: Liana Blum; Bookings: Ruth Hilton. (Photo by Andreas Laszlo Konrath for National Geographic

ECA Field Trip

# Shu Yang Named To Inaugural National Geographic 33 Extraordinary Changemakers List (Penn Engineering Today)

"National Geographic announced the launch of the National Geographic 33, a prestigious new list celebrating 33 extraordinary individuals whose transformative ideas and relentless determination are creating a more sustainable future for our planet. The inaugural list includes a diverse group of changemakers — scientists, innovators, artists, entrepreneurs and advocates — whose collective efforts span various fields from environmental conservation and climate action to social justice and public health. The honorees have displayed exceptional leadership, offering fresh solutions to the world's most pressing challenges.

Yang has been named to the list for her pioneering work in biomimicry, a field dedicated to finding innovative solutions to global problems by studying and emulating patterns in the natural world. Yang's research has provided groundbreaking approaches to sustainable technologies, materials and processes, all aimed at addressing environmental and societal issues. Her recognition is also a reflection of her commitment to mentoring the next generation of innovators."

In her <u>National Geographic</u> profile story, Shu is aptly quoted saying "I don't think I'm the supersmart person, but I bring the smart people together,"

Congratulations to our <u>NRT Climate Care Program Director</u> for this tremendous achievement!

# Field Trip to Energy Coordinating Agency (ECA)

Approximately 20 students (including NRT Climate Care Fellow Zhan Shi) participated in a tour of the <u>Energy Coordinating Agency</u> (ECA) led by Steve Luxton, CEO. The ECA conducts weatherization of low and middle-income households (about 1,000 energy audits per year).

The tour was in their training center, which provides classes for auditing, weatherization, HVAC repair, and PV installation. The center features a rainwater capture system, a thermal solar system, a PV system, and construction training.

Thank you to Dr. William W. Braham, FAIA, Andrew Gordon Professor & Director, Dept. of Architecture, Weitzman School of Design, for organizing this informative and interactive field trip.

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NRT Climate Care Kickoff Meeting at Glandt Forum/Singh Center



NRT Climate Care Fellows brainstorming during Hackathon exercise



Vanessa Chan, Vice Dean of Innovation & Entrepreneurship, discussing Adoption Readiness Level

Check out our website below to learn more:

https://climatecare.seas.upenn.edu/



# NRT Climate Care Kickoff Meeting (Symposium) Summary

On 13 May, The National Research Traineeship (NRT) Climate Care program (Climate Action and Resilience for Extreme Urban Heat) held its inaugural symposium at the University of Pennsylvania (Glandt Forum/Singh Center).

Industry leaders from Dow, Lawrence Livermore National Laboratory (LLNL), Green Building United, and KieranTimberlake, distinguished Penn faculty, and NRT Climate Care Fellows shared their latest research, best practices, and market trends.

The day long meeting began with NRT Faculty/PI research presentations by professors Shu Yang, Dorit Aviv, William Braham, and Paulo Arratia.

Ryan Welsh (KieranTimerberlake) and Richard Freeh (Green Building United) then talked about their respective companies' mission and goals.

Additional highlights included our NRT Climate Care Fellows (Makyla Boyd, Zhan Shi, Hannah Clarkson, and Ji Yoon Bae) sharing their research initiatives throughout the morning and afternoon along with our other industry expert sessions from Wenqin Wang (Sunny), Dow discussing "Advancing Sustainability in Coatings: Dow Coating Materials" and Congwang Ye, LLNL, speaking about "Gap: Scaling Lab Research for Industrial Impact".

More sessions of note were "Adoption Readiness Level", Vanessa Chan, Vice Dean of Innovation & Entrepreneurship and "Ethics in Design", Professor Franca Trubiano (Act 1 - Design and Construction of High-Performance Homes; Act 2 - Do You Know Where Your Materials Come From?; Act 3 – Design Futures for the More than Human).

Furthermore, an interactive Hackathon activity with the Fellows was led by LeAnn Dourte, NRT Climate Care Education Director. Fellows were asked to brainstorm, develop, and present innovative research ideas that address critical challenges related to climate action and resilience for extreme urban heat, leveraging insights learned from the symposium content given throughout the day.

### Earth Day 2025 Reflections



Hannah Clarkson, NRT Climate Care Fellow

"I see Earth Day as a chance to reflect on the importance of the work that we do. It's often easy to get lost in the monotony of everyday tasks, so it's important to take a step back and see the big picture; our work strives to improve climate health and mitigate greenhouse gas emissions. The environment gives so much to us, so it's our responsibility to give back through our research."



Ji Yoon Bae, NRT Climate Care Fellow

"The Earth's ecosystem offers a variety of adaptive mechanisms that have evolved over millions of years to adjust to external changes. These mechanisms serve as a source of inspiration for creating innovative solutions in the face of today's climate crisis. In this sense, Earth Day reminds me of the greatness of ecosystems and motivates me to conduct research with a greater sense of responsibility toward addressing climate change."