



The National Science Foundation (NSF) established the Partnerships in International Research and Education (PIRE) program to support fundamental, international research and education in physical, living, human, and engineered systems. This year, two Rice students participated in the program, visiting TU-Delft in the Netherlands. Here is a recap of their experience.



“PIRE was an incredible experience that introduced me to Dutch flood mitigation techniques and policies and how they might be applied to Texas. Seeing the Maeslant barrier up close displayed the magnitude of structures needed to protect coastal ports from surge events. Inland, the City of Kampen’s inflatable river barrier and volunteer-deployed modular barrier show how riverine communities can adapt to climate change. Urban projects like the Benthemplein in Rotterdam provide examples of how flood infrastructure can provide multifunctional value. Aside from site visits, meeting with professors at TU-Delft provided great insights in research and best practices.”

True Furrh, Rice Ph.D. Student

The PIRE Coastal Flood Risk Reduction Research Travel Program was an amazing opportunity for me to experience flood mitigation techniques unique from those we normally utilize in the United States. One of the biggest highlights for me on this trip was learning about how the citizens of Kampen participate in their own flood safety measures. I never would have imagined it would be possible to rally together so many volunteers to manually close floodgates across streets and in front of houses all along the IJssel River during a flood event. Seeing the size of the Maeslant Barrier in person really made me understand the scale of these flood mitigation projects in a way I never could have just by reading about them online. I've always specifically been interested in green flood mitigation, so it was so impactful to see projects like Room for the River and the

Marker Wadden and learn about how they were designed and employed, as well as get insight on how public perception impacted their development. PIRE also gave me the opportunity to interact with professors and students with different interests and areas of study than my own, both from the Netherlands as well as within my own PIRE case study group. This program really inspired me to think more critically about how we view flood risk in Houston and how we could learn from other countries' flood management practices.”

Mia Peeples, Rice MS Student