



Na Xu grew up as the only child in her family although she wishes she had brothers or sisters. She and her fiancé plan to have more than one child in the future. In her spare time she enjoys jogging, hiking and reading as well as travelling around the world savoring the beauty of nature and experiencing different cultures.

Na grew up in Yueyang, a small city along the Yangtze River in central China that frequently suffers from flooding. Seeing the devastating power of flooding first-hand filled her with a desire to understand the forces of water, so she chose hydraulic engineering as her major in college. After receiving her bachelor's and master's degrees from the Department of Hydraulic and Hydropower Engineering at Tsinghua University in China, she entered the doctoral program in 2005 at Yale School of Forestry and Environmental Studies in the United States.

Na XU

Home Country

China

Degree

PhD in Environmental
Science

Expertise

Hydrology and Biochemistry

Research Focus

Dynamics of Dissolved
Organic Matter in Water

Host University

Yale University, United States

Fellowship Awarded

2010

In her PhD research at Yale Na is investigating the dynamics of dissolved organic matter (DOM) in terrestrial and aquatic environments. DOM is a complex of organic compounds with differing reactivity and ecological roles. Higher concentrations of DOM may enhance the transport of nutrients and associated pollutants to freshwaters, where they contribute to harmful algal blooms and severe reductions in water quality. Long-term rising trends of DOM export to rivers in the northern hemisphere have been linked to climate change, but a comprehensive understanding of DOM dynamics in watersheds remains challenging due to the complex interactions between hydrological, geochemical, and biological processes.

Na's research objective is to generate knowledge that can be used to make well-informed water-resource management decisions for sites that are impacted by polluted water, or that suffer from freshwater scarcity. She is especially interested in studying the poor quality of freshwater in her home country, where groundwater and surface water are so polluted from man-made or natural contaminants that 60 percent of the rivers cannot be used as sources of drinking water and 320 million people lack access to clean drinking water. Na hopes her research will help to alleviate those challenges.

When she returns to China Na plans to teach at Tsinghua University.