Dr. Zhiyong Wang
Professor (By Courtesy), Biology

Bio

Dr. Wang is the acting director of the Department of Plant Biology, Carnegie Institution for Science, and a professor by courtesy of the Department of Biology, Stanford University. He is currently an associate editor of Molecular Cellular Proteomics, and editorial board member of Molecular Plant. He is a Fellow of the American Association for the Advancement of Science (AAAS) and recipient of the Humboldt Research Prize.

Dr. Wang obtained his Ph.D. in 1998 from UCLA, where he cloned the plant circadian clock gene CCA1. He did his postdoctoral research at the Salk Institute, where he studied the brassinsteroid signaling mechanism mediated by the BRI1 receptor kinase. Since joining Carnegie in 2001, his research has illustrated the receptor kinase signaling pathway that links the BRI1 receptor kinase to the BZR1 transcription factor and brassinosteroid-responsive genes in the Arabidopsis genome. He further demonstrated how the steroid signaling pathway integrates at the molecular level with other hormonal pathways, light signaling pathways, nutrient-sensing pathways, immunity pathways, and the circadian clock, to coordinately regulate plant growth and development. His lab uses combinations of genomic and proteomic approaches to understand how cellular signals are transduced and integrated through posttranslational modifications (e.g. phosphorylation and O-Glycosylation) and protein-protein interactions. His studies are elucidating the molecular mechanisms that control plant growth and mediate responses to environmental changes.