

Caroline Dean

Dr. Caroline Dean's interest in plant development started as a product of where she grew up. Northern England had distinct seasons that she missed when she moved to California. She became curious about how "plants use seasonal cues to time their development".

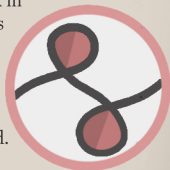
She has transitioned from academia to industry and back. She did her postdoc at a biotech company and eventually moved back to the John Innes Center.

HER SCIENTIFIC WORK



Her goal is to uncover the full mechanism of epigenetic switching and inheritance. They use vernalization as a model to understand the quantitative regulation and cold-induced epigenetic silencing of a particular gene.

The Dean lab's work in vernalization can help us understand chromatin silencing mechanisms in other species, unravelling remaining questions about how transcription is controlled.



Dr. Dean's inspiration comes looking outside her specific area of research: "to make the next really big conceptual advance you have to think very broadly and compare mechanisms across all of life."