DEPARTMENT OF BIOLOGY | UNIVERSITY of WASHINGTON

Biology Seminar

By: Dr. José Dinneny

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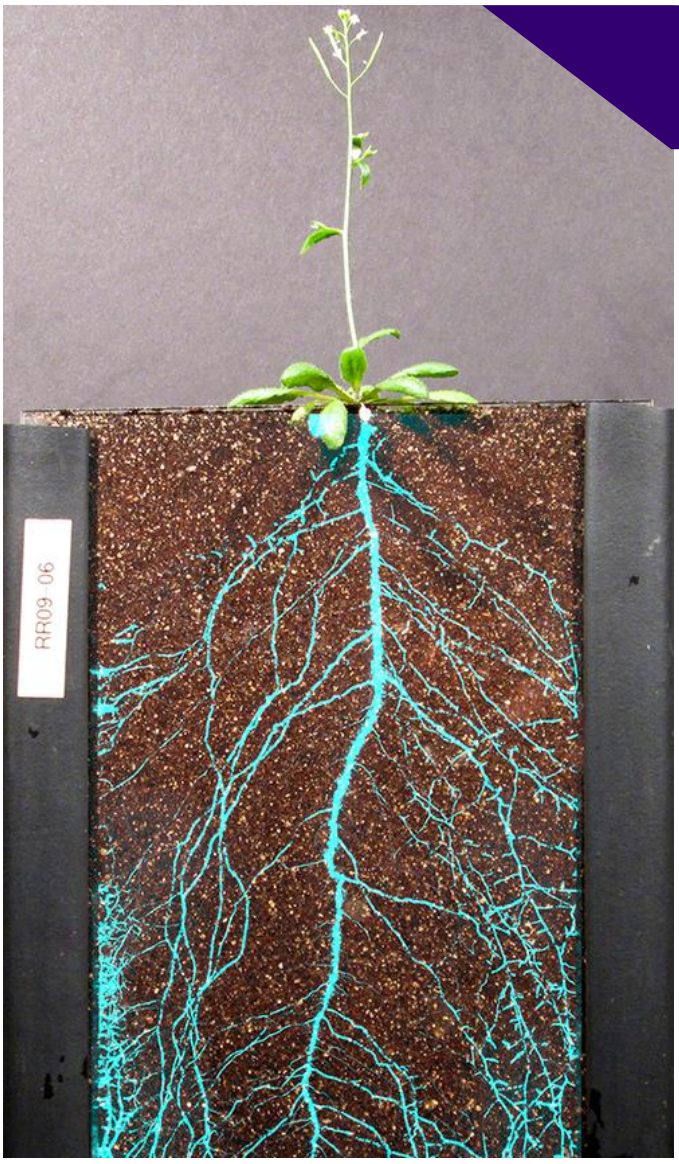
https://dinnenylab.me/

Stressed! How plants cope through dynamic responses.



Wednesday, March 01, 2017 | 12:00pm
HCK 132 Refreshments at 11:45am

One of our greatest challenges in the next 50 years will be to realize a global society that is fully sustainable. Water is the most limiting resource for plant growth and agriculture uses between 70-80% of the fresh water supply. Despite its critical importance, key questions remain regarding how plants sense, transport and efficiently use water. My research aims to understand plant-environment interactions using a holistic approach that emphasizes the importance of developmental pathways and molecular genetic mechanisms in guiding acclimation and homeostatic processes. This work has led to the exploration of water-stress responses in plants at unparalleled spatial and temporal resolution, the discovery of novel adaptive mechanisms used by roots to capture water and the invention of imaging methods that enable multidimensional studies of plant acclimation. Today's research goals focus on understanding the signaling mechanisms plants use to sense water availability and the characterization of the molecular-genetic basis for naturally occurring adaptive innovations that allow plants to survive water-limiting environments.

Seminar Speaker Host: Takato Imaizumi, Professor