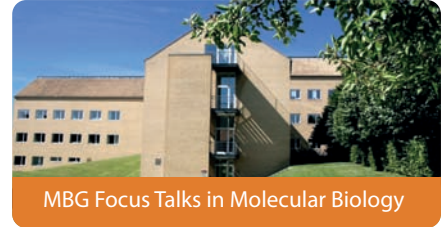


# MBG FOCUS TALK

hosted by section for Plant Molecular Biology



**Wednesday 7th September 2016 at 9:00-10.00**

Mogens Zielerstuen, AU Conf. Centre, Fredrik Nielsens Vej 2 (Building 1422)

**Dr Anrea Genre**

University of Torino, Italy

## **Live cell imaging of arbuscular mycorrhizal interactions**

Cell biology studies of arbuscular mycorrhizas, the widespread mutualistic symbiosis between most plants and a group of soil fungi, has long been based on the observation of fixed sections from colonized roots, in either optical or electron microscopy. A big technical advancement came in the early 2000's when the combined application of confocal microscopy, in vitro culture of mycorrhizal root organ explants and fluorescent protein tags opened the way to live imaging of sub-cellular components in living mycorrhizal roots.

In my presentation I will review the research we have done in collaboration with several European partners during the last 12 years, shedding light on unexpected details of this fascinating plant-fungus interaction, ranging from presymbiotic signal exchange to the host cell developmental process that allows intracellular housing of fungal hyphae and arbuscules.