

UNIVERSITÄT BONN

Die Pflanzenwissenschaftlichen Institute

Einladung zum Pflanzenwissenschaftlichen Kolloquium

Freitag, den 26. Mai, 12 c.t.

Nussallee 4, Hörsaal Botanik

Referent: Prof. Dr. Till Ischebeck

Grüne Biotechnologie, Institut für Biologie und Biotechnologie der Pflanzen, WWU Münster

Thema: "A Hundred million rings to rule them all, and to the plasma membrane bind them – Identification of a lipid droplet – plasma membrane tether"

Lipid droplets (LDs, also referred to as oil bodies or oleosomes) are subcellular structures that consist of proteins attached to or embedded in a phospholipid monolayer surrounding a hydrophobic core of mostly triacylglycerol. In plants, LDs are most prominent in seeds where they fuel seedling establishment. Here we found that almost all LDs are closely associated with the plasma membrane and we deciphered a two protein families required for this association:

SEED LIPID DROPLET PROTEIN 1 and 2 (SLDP1/2) and their binding partner LIPID DROPLET PLASMA MEMBRANE ANCHOR (LIPA) are proteins of previously unknown function that directly interact with each other. As LIPA is associated with the plasma membrane and SLDP with LDs, these proteins are able to immobilize LDs at the plasma membrane.

Diskussionsleitung: Prof. Dr. Peter Dörmann, IMBIO, Molecular Biotechnology, Universität Bonn

Zu diesem Vortrag und zu einer evtl. Nachsitzung sind Sie herzlich eingeladen