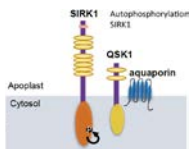


# Molecular Plant Biophysics and Biochemistry

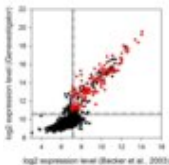
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2019

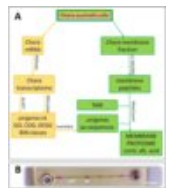


**Wu XN, Chu L, Xi L, Perti-Obermeyer H, Li Z, Sklodowski K, Sanchez-Rodriguez C, Obermeyer G, Schulze WX (2019)** Sucrose-induced Receptor Kinase 1 is modulated by an interacting kinase with short extracellular domain. *Molecular & Cellular Proteomics* 18: 1556–1571

2018

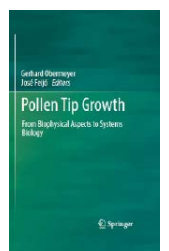


**Perti-Obermeyer H, Lackner P, Dunlop JWC, Obermeyer G (2018)** The pollen plasma membrane permeome converts transmembrane ion transport into speed. *Advances in Botanical Research*, 87: 215-265, DOI: 10.1016/bs.abr.2018.09.008



**Perti-Obermeyer H, Lackner P, Schulze WX, Hoepflinger MC, Hoefftberger M, Foissner I, Obermeyer G (2018)** Dissecting the subcellular membrane proteome reveals enrichment of H<sup>+</sup> (co-) transporters and vesicles trafficking proteins in acidic zones of *Chara* internodal cells. *PLoS ONE* 13(8): e0201480

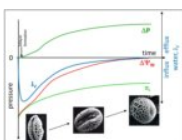
2017



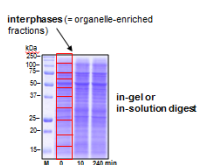
**Obermeyer G, Feijo J (2017)** Pollen Tip Growth: From biophysical aspects to systems biology. Springer, DOI: 10.1007/978-3-319-56645-0

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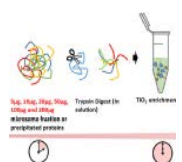
**Obermeyer G, Feijo, J (2017)** Pollen tubes and tip growth: of biophysics and tipomics. In: Obermeyer G, Feijo J (eds) Pollen Tip Growth: From biophysical aspects to systems biology. Chapt. 1, 293-318. Springer, DOI: 10.1007/978-3-319-56645-0



**Obermeyer G (2017)** Water transport in pollen. In: Obermeyer G, Feijo J (eds) Pollen Tip Growth: From biophysical aspects to systems biology. Chapt. 2, 293-318. Springer, DOI: 10.1007/978-3-319-56645-0

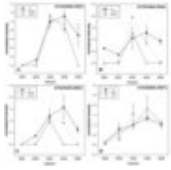


**Perti-Obermeyer H (2017)** The pollen membrane proteome. In: Obermeyer G, Feijo J (eds) Pollen Tip Growth: From biophysical aspects to systems biology. Chapt. 11, 293-318. Springer, DOI: 10.1007/978-3-319-56645-0



**Wu X-N, Xi L, Perti-Obermeyer H, Li Z, Chu LC, Schulze WX (2017)** Highly Efficient Single-Step Enrichment of Low Abundance Phosphopeptides from Plant Membrane Preparations. *Front Plant Sci* 8, doi: 10.3389/fpls.2017.01673

2016

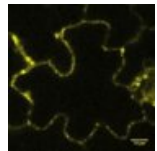


**Pertl-Obermeyer H, Wu XN, Schrod J, Müdsam C, Obermeyer G, Schulze WX** (2016) Identification of cargo for adaptor protein (AP) complexes 3 and 4 by sucrose gradient profiling. *Mol. Cell. Proteomics*, 15: 2877-2889

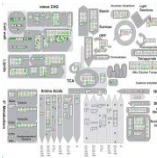
2015



**Gimeno A, Meikl M, Pitt A, Winkler M and Berninger U-G** (2015) Testing of fire salamanders around Salzburg for *Batrachochytrium salamandrivorans* within a school project. *eco.mont* 7: 72-76

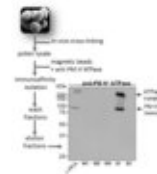


**Safarian MJ, Pertl-Obermeyer H, Lughofer P, Hude R, Bertl A, Obermeyer G** (2015) Lost in traffic? The K<sup>+</sup> channel of lily pollen, LilKT1, is detected at the endomembranes inside yeast cells, tobacco leaves and lily pollen. *Front Plant Sci*, 6: doi:10.3389/fpls.2015.00047

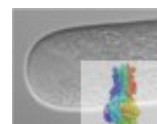


**Lang V, Usadel B, Obermeyer G** (2015) *De novo* sequencing and analysis of the lily pollen transcriptome - an open access data source for an orphan plant species. *Plant Mol Biol*, 87: 69-80

2014



**Pertl-Obermeyer H, Schulze WX, Obermeyer G** (2014) In vivo cross-linking combined with mass spectrometry analysis reveals receptor-like kinases and Ca<sup>2+</sup> signalling proteins as putative interaction partners of pollen plasma membrane H<sup>+</sup> ATPases. *J Proteomics*, 108:17-29

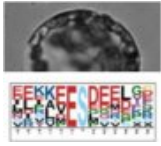


**Lang V, Pertl-Obermeyer H, Safarian MJ, Obermeyer G** (2014) Pump up the volume - A central role for the plasma membrane H<sup>+</sup> pump in pollen germination and tube growth, *Protoplasma*, 251: 477-488

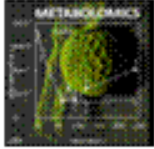


**Pertl-Obermeyer H, Obermeyer G** (2013) Pollen cultivation and preparation for proteome studies. In: *Plant Proteomics, Methods and Protocols* (Jorin J et al., eds.) 2<sup>nd</sup> edition, chapter 30, Springer Press

## 2013



**Wu XN, Sanchez-Rodriguez C, Pertl-Obermeyer H, Obermeyer G, Schulze WX** (2014) Sucrose-induced receptor kinase SIRK1 regulates plasma membrane aquaporins in Arabidopsis. *Mol Cell Proteomics*, 12: 2856-2873



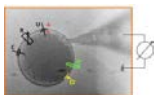
**Obermeyer G, Fagner L, Lang, V, Weckwerth W** (2013) Dynamic adaption of metabolic pathways during germination and growth of lily pollen tubes after inhibition of the electron transport chain. *Plant Physiol*, **162**: 1822-1833

## 2012

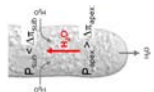


**Siegert M, Pertl-Obermeyer H, Gadermaier G, Ferreira F, Obermeyer G** (2012) Expression of the major mugwort pollen allergen Art v 1 in tobacco plants and cell cultures: problems and perspectives for allergen production in plants. *Plant Cell Rep* **31**: 561-571.

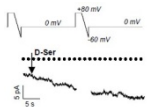
## 2011



**Obermeyer G, Bertl A** (2011) Biophysik im Experiment: Das Membranpotenzial. *Biologie in unserer Zeit* **41**: 206-211



**Winship LJ, Obermeyer G, Geitmann A, Hepler PK** (2011) Pollen tubes and the physical world. *Trends in Plant Science*, **16**: 353-355.



**Michard E, Lima PT, Borges F, Silva AC, Portes MT, Carvalho JR, Gilliam M, Liu L-H, Obermeyer G, Feijo JA** (2011) Glutamate-receptor-like genes form  $Ca^{2+}$  channels in pollen tubes and are regulated by pistil D-serine. *Science*, **332**: 434-437



**Pertl H, Rittman S, Schulze WX, Obermeyer G** (2011) Identification of lily pollen 14-3-3 isoforms and their subcellular and time-dependent expression profile. *Biol. Chem.* **392**: 249-