



### Dr. Junpei Takano Short CV

J. Takano obtained his Ph.D in 2004 under supervision of T. Fujiwara (The University of Tokyo), where he identified boron transport proteins in *Arabidopsis*. During his Ph.D course he studied also under supervision of N. von Wirén in Hohenheim University, Germany (2002-2003). As a post doc, he worked on regulation of boron transport proteins in plants (2004-2007; T. Fujiwara, The University of Tokyo) and zinc transporters in yeast (2007-2008; D. Eide, University of Wisconsin-Madison, US). He then worked as an assistant professor in S. Naito lab, Hokkaido University, on intracellular trafficking of boron transport proteins (2008-2016). Since 2016 he leads his own lab in Osaka Prefecture University focusing on regulatory mechanisms of nutrient acquisition and its application to agriculture.

### Selected publications

- Yoshinari, Hosokawa *et al.* **2021** Transport-coupled ubiquitination of the borate transporter BOR1 for its boron-dependent degradation. **The Plant Cell**.
- Yoshinari *et al.* **2019** Polar localization of the borate exporter BOR1 requires AP2-dependent endocytosis. **Plant Physiology** 179: 1569-1580
- Fukuda, Wakuta *et al.* **2018** Establishment of genetically encoded biosensors for cytosolic boric acid in plant cell. **The Plant Journal** 95: 763–774
- Wang *et al.* **2017** Polar localization of the NIP5;1 boric acid channel is maintained by endocytosis and facilitates boron transport in *Arabidopsis* roots. **The Plant Cell** 29: 824-842
- Takano *et al.* **2010** Polar localization and degradation of *Arabidopsis* boron transporters through distinct trafficking pathways. **PNAS** 107(11): 5220-5225