

Curiculum Vitae - Jürgen Kleine-Vehn

PROFESSIONAL DEVELOPMENT:

- 01/2011-present** **BOKU (University of Natural Resources and Life Sciences)**, Vienna
WWTF Research Group Leader
Department für Angewandte Genetik und Zellbiologie (DAGZ)
- 6/2009-12/2010** **GHENT UNIVERSITY**, Belgium
Project leader
Plant System Biology, Gent
Prof. Dr. Jiri Friml
- 09/2008-6/2009** **GHENT UNIVERSITY**, Belgium
Postdoctoral fellow
Plant System Biology, Gent
Prof. Dr. Jiri Friml
- 08/2007-09/2008** **GHENT UNIVERSITY**, Belgium
09/2008
PhD in Biotechnology: "*intracellular trafficking and polar targeting of auxin transport components*"
VIB, Plant System Biology, Gent
Supervisor: Prof. Dr. Jiri Friml
- 04/2006-08/2007** **EBERHARD-KARLS-UNIVERSITY TÜBINGEN**, Germany
PhD student
Developmental genetics, Tübingen
Supervisor: Prof. Dr. Jiri Friml
- 04/2006** **MANAGEMENT CENTRE EUROPE (MCE)**, Brussel/ Belgium
"Mini-MBA for the life science industry"
- 01/2006-04/2006** **JOLINE**, Hechingen/ Germany
Project manager
Medical engineering of catheters for vascular access
CEO: Lars Sunnanväder
- 11/2002-04/2003** **UNIVERSITY OF STANFORD**, USA
Graduate student
Developmental genetics, Stanford
Supervisor: Prof. Dr. Margaret T Fuller/Prof. Dr. Leanne D Jones
- 10/1999-01/2005** **EBERHARD-KARLS-UNIVERSITY TÜBINGEN**, Germany
10/2001
01/2005
Vordiplom Biologie (equates to "Bachelor of Science"), **Diplom Biologie** (equates to "Master of Science"), Final grade: 1,0
Cell Biology, Genetic, Biochemistry
- 03/2004-11/2004** **Diplomarbeit** (equates to "Master thesis"): "*mechanisms of apical and basal polar targeting of auxin transport components in plant cells*"
(GPA: 1,0)
Developmental Genetics, Tübingen
Supervisor: Prof. Dr. Jiri Friml

AWARDS:

Since 08/2008 **Faculty of 1000**, Associate Faculty Member

10/2001-01/2005 **Friedrich-Ebert-Stiftung**, Scholar

Since 01/2011 **WWTF Young Investigator**, Scholar

POTENTIAL REFERENCES:

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PEER REVIEW PUBLICATIONS:

Sauer M, **Kleine-Vehn J.** (2011) AUXIN BINDING PROTEIN1: the outsider. *Plant Cell*. 23(6):2033-43.

IF: 9.653; 0 times cited*

Zwiewka M, Feraru E, Möller B, Hwang I, Feraru MI, **Kleine-Vehn J**, Weijers D, Friml J. (2011) The AP-3 adaptor complex is required for vacuolar function in Arabidopsis. *Cell Res.* doi: 10.1038/cr.2011.99.

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Zhang J, Vanneste S, Brewer PB, Michniewicz M, Grone P, **Kleine-Vehn J**, Löfke C, Teichmann T, Bielach A, Cannoot B, Hoyerová K, Chen X, Xue HW, Benková E, Zažímalová E, Friml J. (2011) Inositol trisphosphate-induced Ca²⁺ signaling modulates auxin transport and PIN polarity. *Dev Cell*. 20(6):855-66.

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Ding Z, Galván-Ampudia CS, Demarsy E, Langowski L, **Kleine-Vehn J**, Fan Y, Morita MT, Tasaka M, Fankhauser C, Offringa R, Friml J. (2011) Light-mediated polarization of the PIN3 auxin transporter for the phototropic response in Arabidopsis. *Nat Cell Biol.* 13(4):447-52.

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Feraru E, Feraru MI, **Kleine-Vehn J**, Martinière A, Mouille G, Vanneste S, Vernhettes S, Runions J, Friml J. (2011) PIN Polarity Maintenance by the Cell Wall in Arabidopsis. *Curr Biol.* 21(4):338-43.

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Wabnik K^{\$}, **Kleine-Vehn J^{\$\$}**, Balla J, Sauer M, Naramoto S, Reinöhl V, Merks RM, Govaerts W, Friml J^{\$}. (2010) Emergence of tissue polarization from synergy of intracellular and extracellular auxin signaling. *Mol Syst Biol.* 6:447.

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Kleine-Vehn J, Ding Z, Jones AR, Tasaka M, Morita MT, Friml J. (2010) Gravity-induced PIN transcytosis for polarization of auxin fluxes in gravity-sensing root cells. *Proc Natl Acad Sci USA.* 107(51):22344-9.

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Naramoto S, **Kleine-Vehn J**, Robert S, Fujimoto M, Dainobu T, Paciorek T, Ueda T, Nakano A, Van Montagu MC, Fukuda H, Friml J. (2010) ADP-ribosylation factor machinery mediates endocytosis in plant cells. *Proc Natl Acad Sci USA.*

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Robert S^{\$}, **Kleine-Vehn J^{\$}**, Barbez E, Sauer M, Paciorek T, Baster P, Vanneste S, Zhang J, Simon S, Čovanová M, Hayashi K, Dhonukshe P, Yang Z, Bednarek SY, Jones AM, Luschnig C, Aniento F, Zažímalová E, Friml J. (2010) ABP1 mediates auxin inhibition of clathrin-dependent endocytosis in Arabidopsis. *Cell*. 143(1):111-21.

IF: 31.152; 20 times cited*

Dhonukshe P, Huang F, Galvan-Ampudia CS, Mähönen AP, **Kleine-Vehn J**, Xu J, Quint A, Prasad K, Friml J, Scheres B, Offringa R. (2010) Plasma membrane-bound AGC3 kinases phosphorylate PIN auxin carriers at TPRXS(N/S) motifs to direct apical PIN recycling. *Development*. 137(19):3245-55.

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Feraru E, Paciorek T, Feraru MI, Zwiewka M, De Groodt R, De Rycke R, **Kleine-Vehn J**, Friml J. (2010) The AP-3 β adaptin mediates the biogenesis and function of lytic vacuoles in Arabidopsis. *Plant Cell*. 22(8):2812-24.

IF: 9.653; 1 times cited*

Langowski L, Ruzicka K, Naramoto S, Kleine-Vehn J, Friml J. (2010) Trafficking to the outer polar domain defines the root-soil interface. *Curr Biol.* 20(10):904-8.
IF: 10.539; 8 times cited*

Kleine-Vehn J, Huang F, Naramoto S, Zhang J, Michniewicz M, Offringa R, and Friml J (2009) PIN auxin efflux carrier polarity is regulated by PINOID kinase-mediated recruitment into GNOM-independent trafficking in Arabidopsis. *Plant Cell.* 21(12):3839-49.
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Jelínková A, Malínská K, Simon S, Kleine-Vehn J, Pařezová M, Pejchar P, Kubeš M, Martinec J, Friml J, Zažímalová E, Petrášek J. (2009) Probing plant membranes with FM dyes: tracking, dragging or blocking? *Plant J.* 61(5):883-892.
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Kleine-Vehn J, Leitner J, Zwiewka M, Sauer M, Abas L, Luschnig C, Friml J. (2008) Differential degradation of PIN2 auxin efflux carrier by retromer-dependent vacuolar targeting. *Proc Natl Acad Sci U S A.* 105(46):17812-7
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Kleine-Vehn J, Langowski L, Wiśniewska J, Dhonukshe P, Brewer P B, and Friml J (2008) Cellular and Molecular Requirements for Polar PIN Targeting and Transcytosis in Plants. *Mol Plant.* 1(6):1056-1066
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Kleine-Vehn J and Friml J (2008) Polar Targeting and Endocytic Recycling in Auxin-Dependent Plant Development. *Annu. Rev. Cell Dev. Biol.* 24:447-473
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Kleine-Vehn J, Dhonukshe P, Sauer M, Brewer PB, Wiśniewska J, Paciorek T, Benková E, Friml J (2008) ARF GEF-dependent transcytosis and polar delivery of PIN auxin carriers in Arabidopsis. *Curr Biol.* 18(7):526-531
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Kleine-Vehn J, Dhonukshe P, Swarup R, Bennett M and Friml J (2006) Subcellular trafficking of the *Arabidopsis* auxin influx carrier AUX1 uses a novel pathway distinct from PIN1. *Plant Cell.* 18(11):3171-3181
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Dhonukshe P, Kleine-Vehn J, Friml J. (2005) Cell polarity, auxin transport, and cytoskeleton-mediated division planes: who comes first? *Protoplasma.* 226(1-2):67-73
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*ISI Impact Factor (IF) in 2007; Citations are based on ISI/Google Scholar in September 2011

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