CURRICULUM VITAE

doc. Mgr. Aleš Pečinka, Ph.D.
born 1978 in Opava, Czech Republic, married, 2 children

Centre of Plant Structural and Functional Genomics (CPSFG)
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Professional experience and education

2022 – present	**Deputy head**, Centre of Plant Structural and Functional Genomics, Institute of Experimental Botany, Olomouc, Czechia.
2020 – present	**Lecturer**, course Epigenetics, Dept of Cell Biology and Genetics, Faculty of Life Sciences, Palacky University, Olomouc, Czechia.
2017 – present	**Group leader**, Centre of Plant Structural and Functional Genomics, Institute of Experimental Botany, Olomouc, Czechia.
2022	**Docent** (Associate professor), Faculty of Life Sciences, Palacký University Olomouc (**UP**), Olomouc, Czechia.
2017	Privat Dozent (**habilitation**, an equivalent of Associate professor), Faculty of Biology and Biotechnology, Ruhr University Bochum (**RUB**), Bochum, Germany.
2015 – 2017	**Research group leader**, Max Planck Institute for Plant Breeding Research (**MPIPZ**), an Independent research group associated with the Department of Plant Developmental Biology, Cologne, Germany.
2014 – 2017	**Guest lecturer**, Ruhr University Bochum (**RUB**), Dept. of Plant Physiology, head Prof. Dr. Ute Krämer, Bochum, Germany.
2010 – 2015	**Project leader**, **MPIPZ**, Dept. of Plant Breeding and Genetics, Cologne, Germany.
2006 – 2010	**Post-doc**, Gregor Mendel Institute of Molecular Plant Biology (**GMI**), Vienna, Austria.
2005	**Ph.D.** - University of Halle-Wittenberg, Halle (Saale), Germany
2001 – 2005	**Ph.D. studies**, Leibnitz Institute of Plant Genetics and Crop Plant Research (**IPK**), Gatersleben, Germany.
1996 – 2001	**Bc., M.Sc., Palacky University**, Dept. of Botany, Olomouc, Czech Republic.

Editorial boards and advisory panels

2024 – present	**International Advisory Board member**, Institute of Botany of the Czech Academy of Sciences, Průhonice, Czechia.
2023 – present	**External Advisory Board member**, Marie Sklodowska Curie Actions – Doctoral Network – EpiSeedLink.
2022 – present	**Editor** for **Scientific Reports** – Nature Publishing Group.

2018 – present **Editorial board** member of **Cytologia** – Published by Japan Mendel Society.

2021 – 2022 Editor for International Journal of Molecular Sciences (IJMS).

2018 –2021 **Core group member and national representative** of the **COST action** 16212 "Impact of Nuclear Domains On Gene Expression and Plant Traits" (INDEPTH).

Grants and Awards (as PI unless stated otherwise)

2025 – 2027 **Research grant** from the **Czech Science Foundation (GAČR)** „Role of DNA clamp complexes in the maintenance of genome stability in Arabidopsis", 5.151 Mio CZK.

2024 – 2027 **Inter-COST grant** from the **Czech Ministry of Science and Education** „Characterization of imprinted genes in barley with a focus on maternally expressed factor LYS3", 4.816 Mio CZK.

2024 – 2026 **Research grant** from **GAČR** "Effects of heat stress on the nuclear organization and epigenetic regulation in barley", 8.418 Mio CZK.

2022 – 2024 **Research grant** from **GAČR** "Role of Condensin II Complex in the DNA Damage Repair of *Arabidopsis thaliana*", 7.733 Mio CZK.

2021 – 2023 **Research grant** from **GAČR** "Identification and characterization of imprinted genes during barley seed development", 8.187 Mio CZK.

2019 – 2021 **Research grant** from **GAČR** "Analyzing repair of toxic DNA-protein crosslinks in Arabidopsis", 7.650 Mio CZK.

2018 – 2021 **Inter-COST grant** from the **Czech Ministry of Science and Education** "Analysis of the 3D organization of the nuclear genome in plants with contrasting amount of DNA", 4.428 Mio CZK.

2018 – 2022 **Purkyně Fellowship** from the Czech Academy of Sciences, 5.250 Mio CZK.

2018 – 2020 **Research grant** from **GAČR** "Analysis of nuclear organization and dynamics in endosperm tissues of barley", 5.851 Mio CZK.

2015 – 2018 **Research grant** from the German grant agency (**DFG**) "Comparative transposable element silencing and chromatin analysis of *Arabidopsis lyrata* and *Arabidopsis thaliana*", 120 k Euro.

2011 – 2014 **Research grant** from **DFG** "Epigenetic control of repetitive DNA in the genome of *Arabidopsis lyrata*", 120 k Euro.

Selected third-party funding acquired as the host

2022 – 2024 **PPPLZ Fellowship** (Czech Academy of Sciences) to Jana Zwyrtková

2022 – 2024 **PPPLZ Fellowship** (Czech Academy of Sciences) to Fen Yang.

2017 – 2020 **Fisher fellowship** to Fen Yang from the Palacky University, Olomouc.

2017 – 2019 **Post-doc fellow** position for Dr. Pranav Sahu from the **Marie Sklodowska-Curie Actions**.

2016 – 2019 **Ph.D. fellowship** to Fen Yang from China Scholarship Council.

2015 – 2016 **Post-doc fellowship** to Dr. Anna Nowicka from the German Academic Exchange Service (DAAD).

2013 – 2017 **Ph.D. fellowship** to Mariana Díaz from the German Academic Exchange Service (DAAD).

Selected oral presentations in the past 5 years

- Plant and Animal Genome 32, Mutation Workshop, San Diego, USA (2025)
- EMBO Workshop – Evolution and diversity of the DNA damage response, Lonavala, India (2024)
- European Workshop on Plant Chromatin (2022, 2024)
- Plant Genome Stability and Change (2021, 2024)
- 26th International Conference on Sexual Plant Reproduction, Praha, Czech Republic (2022)
- Talk at Cluster of Excellence on PLAnt Science/Heinrich Heine University, Dusseldorf, Germany (2022)
- Society of Experimental Biology, Annual Meeting, Montpellier, France (2022)

Science communication (presentations in Czech language)

Popular article "Jaká bude budoucnost šlechtění rostlin?" in the magazine Nová Botanika (2020/číslo 1)
Genetické modifikace: Ze zkumavky na pole? Akademie věd ČR, Praha (18.3.2019)
Talks for public on the theme of genome editing and new genomic techniques: GMO aneb kouzelnické triky v laboratoři. Mendel Museum, Brno (28.11.2018)
Regular guest in the radio show ČR PLUS "Laboratoř vědců a herců", moderated by M. Mašková.

Ph.D. students

M.Sc. Ahel Bhattacharyya (2024-), **Mgr. Peter Šály** (2024-), **Dr. Jovanka Vladejić** (jointly with Dolezel group; 2018-2024; next: post-doc Laboratory of Growth Regulators, IEB, CZ), **Dr. Martin Kovačik** (2018-2024; next: post-doc Pecinka group), **Dr. Kateřina Kaduchová** (2019-2024; next: post-doc Pecinka group), **Dr. Klara Prochazkova** (2018–2023; next: pharmaceutical company, Praha, CZ), **Dr. Fen Yang** (2016–2021; next: post-doc Pecinka group), **Dr. Kashif Nawaz** (2015–2018; next: post-doc, KAUST, SA), **Dr. Mariana Diaz** (2013–2018; next: post-doc, Tokyo Univ of Science, Matsunaga lab, JP), **Dr. Ahmed Abdelsamad** (2012–2016; next: Lecturer, Cairo University, Egypt), **Dr. Bjoern Pietzenuk** (2012–2015; next: post-doc, Ruhr Uni Bochum, Kraemer lab, DE), **Dr. Chun-Hsin Liu** (2012–2015; next: Biotech company, Taiwan), **Dr. Thomas Piofczyk** (2011–2014; next: BioGazelle, Belgium)

Languages

English: fluent; German: good; Czech: mother tongue

PUBLICATIONS

Total publications in journals with impact factor: 77
Lifetime citations (Web of Science): 3462 (without self-citations: 3255); 01/2025
H-index: 29 (Web of Knowledge)
* – Corresponding author
JIF – Journal impact factor (Thomson ISI) from the year of publication, unless stated otherwise.

Journal publications

77. Dvořák Tomaštíková E, *Pecinka A. (2025) Cytidine analogs in plant epigenetic research and beyond. J Exp Bot, DOI: 10.1093/jxb/erae522.
76. Hajný J, Trávníčková T, Špundová M, Roenspies M, Rony RMIK, Sacharowski S, Krzyszton M, Zalabák D, Hardtke CS, Pečinka A, Puchta H, Swiezewski S, van Norman JM, Novák O. (2024) Sucrose-responsive osmoregulation of plant cell size by a long non-coding RNA. Mol Plant, 17:1719-1732. doi: 10.1016/j.molp.2024.09.011.
75. Nowicka, A, Kovacik, M, Maksylewicz, A, Kopeć, P, Dubas, E, Krzewska, M, Springer, A, Hoffie, RE, Daghma, DS, Milec, Z, Pecinka, A, Kumlehn, J, Żur, I (2024): The transcriptional landscape of the developmental switch from regular pollen maturation towards microspore-derived plant regeneration in barley. *Crop J*, 12: 1064-1080.
74. Dvořák Tomaštíková E, Vaculíková J, Štenclová V, Kaduchová K, Pobořilová Z, Paleček JJ, Pecinka A. (2024). The interplay of homology-directed repair pathways in the repair of zebularine-induced DNA-protein crosslinks in Arabidopsis. *Plant J*. 119:1418-1432. doi: 10.1111/tpj.16863.
73. Dvořáčková M, Fajkus J, Mozgová I, Pečinka A. (2024). Advances in plant chromatin. *Plant J*, 118: 1281-1283.
72. Kovacik M, Nowicka A, Zwyrtková J, Strejčková B, Vardanega I, Esteban E, Pasha A, Kaduchová K, Krautsova M, Červenková M, Šafář J, Provart NJ, Simon R, *Pecinka A. (2024). The transcriptome landscape of developing barley seeds. *Plant Cell*, 36: 2512-2530.
71. Vladejić J, Kovacik M, Zwyrtková J, Szurman-Zubrzycka M, Doležel J, *Pecinka A. (2024). Zeocin-induced DNA damage response in barley and its dependence on ATR. *Scientific Rep*, 2024 Feb 7;14(1):3119. doi: 10.1038/s41598-024-53264-0.
70. Kaduchová, K., Čmiel, V., Koláčková, V., & *Pecinka, A. (2024). EasyClick: an improved system for confocal microscopy of live roots with a user-optimized sample holder. *Planta*, 259: 22. https://doi.org/10.1007/s00425-023-04293-y.
69. Kaduchová K, Marchetti C, Ovečka M, Galuszka P, Bergougnoux V, Šamaj J, *Pecinka A. (2023). Spatial organization and dynamics of chromosomes and microtubules during barley mitosis. *Plant J*, 115:602-613. doi: 10.1111/tpj.16355.
68. Agius DR, Kapazoglou A, Avramidou E, Baranek M, Carneros E, Caro E, Castiglione S, Cicatelli A, Radanovic A, Ebejer JP, Gackowski D, Guarino F, Gulyás A, Hidvégi N, Hoenicka H, Inácio V, Johannes F, Karalija E, Lieberman-Lazarovich M, Martinelli F, Maury S, Mladenov V, Morais-Cecílio L, Pecinka A, Tani E, Testillano PS, Todorov D, Valledor L, Vassileva V. (2023). Exploring the crop epigenome: a comparison of DNA methylation profiling techniques. *Front Plant Sci*, 14: 1181039. doi: 10.3389/fpls.2023.1181039.

67. Lelkes E, Jemelková J, Holá M, Štefanovie B, Kolesár P, Vágnerová R, Dvořák Tomaštíková E, **Pecinka A**, Angelis KJ, Paleček JJ. (2023). Characterization of the conserved features of the NSE6 subunit of the Physcomitrium patens SMC5/6 complex. ***Plant J,*** doi: 10.1111/tpj.16282.
66. *Nowicka A., Ferková L., Said M., Kovacik M., Zwyrtková J., Baroux C., ***Pecinka A.** (2023). Non-Rabl chromosome organization in endoreduplicated nuclei of barley embryo and endosperm tissues. ***J Exp Bot,*** 74: 2527-2541, https://doi.org/10.1093/jxb/erad036.
65. Dvořák Tomaštíková, E., Yang, F., Mlynárová, K., Hafidh, S., Schořová, Š., Kusová, A., Pernisová, M., Přerovská, T., Klodová, B., Honys, D., Fajkus, J., **Pecinka, A.** and Procházková Schrumpfová, P. (2023). RUVBL proteins are involved in plant gametophyte development. ***Plant J***, https://doi.org/10.1111/tpj.16136.
64. *Dvořák Tomaštíková E., Prochazkova K., Yang F., Jemelkova J., Finke A., Dorn A., Said M., Puchta H., ***Pecinka A.** (2023). SMC5/6 complex-mediated SUMOylation stimulates DNA–protein cross-link repair in Arabidopsis. ***Plant Cell***, 35: 1532-1547. https://doi.org/10.1093/plcell/koad020.
63. Randall R.S., Jourdain C., Nowicka A., Kaduchová K., Kubová M., Ayoub M.A., Schubert V., Tatout C., Colas I., Kalyanikrishna, Desset S., Mermet S., Boulaflous-Stevens A., Kubalová I., Mandáková T., Heckmann S., Lysak M.A., Panatta M., Santoro R., Schubert D., Pecinka A., Routh D., Baroux C. (2022). Image analysis workflows to reveal the spatial organization of cell nuclei and chromosomes, ***Nucleus***, 13:1, 277-299, DOI: 10.1080/19491034.2022.2144013
62. Oruganti, V., Toegelová, H., **Pecinka, A.**, Madlung, A., Schneeberger, K (2022). Rapid large-scale genomic introgression in Arabidopsis suecica via an autoallohexaploid bridge. ***Genetics***, 223: iyac132. (JIF 2022: 4.562).
61. Varotto S., Krugman T., Aiese Cigliano R., Kashkush K., Kondić-Špika A., Aravanopoulos F.A., Pradillo M., Consiglio F., Aversano R., **Pecinka A.**, Miladinović D. (2022). Exploitation of epigenetic variation of crop wild relatives for crop improvement and agrobiodiversity preservation. ***Theor Appl Genet***. doi: 10.1007/s00122-022-04122-y (JIF 2022: 5.699).
60. Zuo, S., Yadala, R., Yang, F., Talbert, P., Fuchs, J., Schubert, V., Ahmadli, U., Rutten, T., **Pecinka, A.**, Lysak, M.A., Lermontova I (2022). Recurrent plant-specific duplications of KNL2 and its conserved function as a kinetochore assembly factor, ***Mol Biol Evol***, 39: msac123, https://doi.org/10.1093/molbev/msac123 (JIF 2022: 8.800).
59. Yang F, ***Pecinka, A.** (2022). Multiple Roles of SMC5/6 Complex during Plant Sexual Reproduction. ***Int J Mol Sci***, 23: 4503, doi: 10.3390/ijms23094503. Special Issue "DNA Damage and Repair in Plants 2.0", B. Hohn and J. Molinier (eds.) (JIF 2022: 5.923).
58. ***Pecinka, A.**, Procházková Schrumpfová, P., Fischer, L., Dvořák Tomaštíková, E., Mozgová, I. (2022). The Czech plant nucleus workshop 2021. ***Biol Plantarum***, 66: 39-45. (JIF 2022: 1.122).
57. Prochazkova K, Finke A, Tomaštíková ED, Filo J, Bente H, Dvořák P, Ovečka M, Šamaj J, ***Pecinka A** (2022). Zebularine induces enzymatic DNA-protein crosslinks in 45S rDNA heterochromatin of Arabidopsis nuclei. ***Nucleic Acids Res***, 50: 244-258. doi: 10.1093/nar/gkab1218. (JIF 2020: 16.971).
56. Yang FY, Fernández-Jiménez N, Majka J, Pradillo M, ***Pecinka A** (2021): Structural maintenance of chromosomes 5/6 Complex is necessary for tetraploid genome stability in *Arabidopsis thaliana*. ***Front Plant Sci***, 12: 748252 (JIF 2019: 4.407).

55. Yang FY, Fernández-Jiménez N, Tučková M, Vrána J, Cápal P, Díaz M, Pradillo M, *Pecinka A (2021): Defects in meiotic chromosome segregation lead to unreduced male gametes in Arabidopsis SMC5/6 complex mutants. *Plant Cell*, 33: 3104-3119. (JIF 2019/2020: 11.28).

54. Perutka Z, Kaduchová K, Chamrád I, Beinhauer J, Lenobel R, Petrovská B, Bergougnoux V, Vrána J, Pecinka A, Doležel J, Šebela M (2021): Proteome Analysis of Condensed Barley Mitotic Chromosomes. *Front Plant Sci,* 12: 723674, doi: 10.3389/fpls.2021.723674. (JIF 2019: 4.407).

53. Nowicka A, Sahu PP, Kovačik M, Weigt D, Tokarz B, Krugman T, *Pecinka A (2021): Endopolyploidy variation in wild barley seeds across environmental gradients in Israel. *Genes*, 12: 711. (JIF 2019: 3.331).

52. Samakovli D, Tichá T, Vavrdová T, Zázvorková N, Pecinka A, Ovečka M, Šamaj J (2021): HEAT SHOCK PROTEIN 90 proteins and YODA regulate main body axis formation during early embryogenesis. *Plant Physiol*, 186: 1526–1544. (JIF 2019: 6.902).

51. Markus C, Pecinka A, Merotto Jr. A (2021): Insights into the role of transcriptional gene silencing in response to herbicide-treatments in *Arabidopsis thaliana*. *Int J Mol Sci* 22: 3314. (JIF 2019: 4.556).

50. Makowski W, Królicka A, Nowicka A, Zwyrtková J, Tokarz B, Pecinka A, Banasiuk R, Tokarz KM (2021): Transformed tissue of *Dionaea muscipula* J. Ellis as a source of biologically active phenolic compounds with bactericidal properties. *Appl Microbiol Biotechnol* 105:1215-1226. (JIF 2019: 3.530).

49. Jiao W-B, Patel V, Klasen J, Liu F, Pecinkova P, Ferrand M, Gy I, Camilleri C, Effgen S, Koornneef M, Pecinka A, Loudet O, Schneeberger K (2021): The evolutionary dynamics of genetic incompatibilities introduced by duplicated genes in *Arabidopsis thaliana*. *Mol Biol Evol* 38:1225–1240. (JIF 2019: 11.062).

48. Nowicka A, Kovacik M, Tokarz B, Vrana J, Zhang Y, Weigt D, Doležel J, *Pecinka A (2021): Dynamics of endoreduplication in developing barley seeds. *J Exp Bot* 72:268–282. (JIF 2019: 5.908).

47. Kovačik M, Nowicka A, *Pecinka, A. (2020): Isolation of high purity tissues from developing barley seeds. *J Visual Exp* 164:e61681. (JIF 2019: 1.265).

46. Strejčková B, Čegan R, Pecinka A, Milec Z, Šafář J (2020): Identification of polycomb repressive complex 1 and 2 core components in hexaploid bread wheat. *BMC Plant Biol* 20:175. (JIF 2020: 4.215).

45. Nowicka A, Tokarz B, Zwyrtková J, Dvořák Tomaštíková E, Procházková K, Ercan U, Finke A, Rozhon W, Poppenberger B, Otmar M, Niezgodzki I, Krečmerová M, Schubert I, *Pecinka A (2020): Comparative analysis of epigenetic inhibitors reveals different degrees of interference with transcriptional gene silencing and induction of DNA damage. *Plant J* 102:68-84. (JIF 2019: 6.141).

44. *Pecinka A, Chevalier C, Colas I, Kalantidis K, Varotto S, Krugman T, Michailidis C, Vallés M-P, Muñoz A, Pradillo M (2019): Chromatin dynamics during interphase and cell division: similarities and differences between model and crop plants. *J Exp Bot* 71: 5205–5222. (JIF 2019: 5.908).

43 Boudichevskaia A, Houben A, Fiebig A, Prochazkova K, Pecinka A, Lermontova I (2019): Depletion of KNL2 results in altered expression of genes involved in regulation of the cell cycle, transcription, and development in Arabidopsis. *Int J Mol Sci* 20:5726; doi:10.3390/ijms20225726. (JIF 2019: 4.556).

42. Díaz M, Pecinkova P, Nowicka A, Baroux C, Sakamoto T, Gandha PY, Jeřábková H, Matsunaga S, Grossniklaus U, *Pecinka A (2019): SMC5/6 complex subunit NSE4A is involved in DNA damage repair and seed development in Arabidopsis. *Plant Cell* 31:1579-1597 (JIF 2018/2019: 8.63).

41. Finke A, Mandáková T, Nawaz K, Vu G.T.H., Novák P., Macas J., Lysak M.A., ***Pecinka A** (2019): Genome invasion by a hypomethylated satellite repeat in Australian crucifer *Ballantinia antipoda*. ***Plant J*** 99:1066-1079. (JIF 2018/2019: 5.72).

40. Lazaro A, Zhou Y, Giesguth M, Nawaz K, Bergonzi S, **Pecinka A**, Coupland G, Albani MC (2019): *PERPETUAL FLOWERING2* coordinates the vernalization response and perennial flowering in *Arabis alpina*. ***J Exp Bot*** 70:949-961. doi: 10.1093/jxb/ery423 (JIF 2017/2018: 5.35).

39. Vuolo F, Kierzkowski D, Runions A, Hajheidari M, Mentink RA, Gupta MD, Zhang Z, Vlad D, Wang Y, **Pecinka A**, Gan X, Hay A, Huijser P, Tsiantis M (2018): LMI1 homeodomain protein regulates organ proportions by spatial modulation of endoreduplication. ***Genes Dev*** 32: 1361-1366. doi: 10.1101/gad.318212.118 (JIF 2016: 9.4).

38. Diaz M, ***Pecinka A** (2018): Scaffolding for repair: Understanding molecular functions of the structural maintenance of chromosomes SMC5/6 complex in plants. ***Genes*** 9: E36. doi: 10.3390/genes9010036. (JIF 2015: 3.6)

37. Markus C, **Pecinka A**, Karan R, Barney JN, Merotto A Jr. (2018): Epigenetic regulation – contribution to herbicide resistance in weeds? ***Pest Management Science*** 74: 275-281. DOI: 10.1002/ps.4727 (JIF 2016: 3.2).

36. Diaz M, ***Pecinka A** (2017): Seeds as emerging hotspot for maintenance of genome stability. ***Cytologia*** 82: 467-470. (JIF 2016/2017: 0.9)

35. van Esse GW, Walla A, Finke A, Koornneef M, **Pecinka A**, von Korff M (2017): Six-Rowed Spike3 (VRS3) Is a Histone Demethylase That Controls Lateral Spikelet Development in Barley. ***Plant Physiology*** 174: 2397-2408. doi: 10.1104/pp.17.00108. (JIF 2016/2017: 6.4)

34. Baroux C, **Pecinka A**, Fuchs J, Kreth G, Schubert I, Grossniklaus I (2017): Non-random chromosome arrangement in triploid endosperm nuclei. ***Chromosoma*** doi:10.1007/s00412-016-0578-5. (JIF 2014: 4.602; CIT: 0)

33. Willing E-M, Piofczyk T, Albert A, Winkler JB, *Schneeberger K, ***Pecinka A** (2016): UVR2 ensures trans-generational genome stability under simulated natural UV-B in *Arabidopsis thaliana*. ***Nature Communications***, 7: e13522 (JIF 2014: 11.5)

32. Pietzenuk B, Markus C, Gaubert H, Bagwan B, Abdelsamad A, Merotto A, Bucher E, ***Pecinka A** (2016): Recurrent evolution of heat-responsiveness in *Brassicaceae COPIA* elements. ***Genome Biology***, 17: e209 (JIF 2014: 10.8)

31. Vu GTH, Schmutzer T, Bull F, Cao HX, Fuchs J, Tran TD, Jovtchev G, Pistrick K, Stein N, **Pecinka A**, Neumann P, Novak P, Macas J, Deard PH, Blattner FR, Scholz U, Schubert I (2015): Comparative Genome Analysis Reveals Divergent Genome Size Evolution in a Carnivorous Plant Genus. ***Plant Genome*** doi:10.3835/plantgenome2015.04.0021. (JIF 2014: 3.933; CIT: 0)

30. Rawat V, Abdelsamad A, Pietzenuk B, Seymour DK, Koenig D, Weigel D, ***Pecinka A**, *Schneeberger K (2015): Improving the Annotation of *Arabidopsis lyrata* Using RNA-Seq Data. ***PLoS One*** 10(9):e0137391. (JIF 2014: 3.234; CIT: 1)

29. #Liu C-H, Finke A, Díaz A, Rozhon W, Poppenberger B, Baubec T, ***Pecinka A** (2015): ATR and ATM are required for repair of zebularine-induced DNA damage in *Arabidopsis thaliana*. ***Plant Cell*** 27: 1788-1800. (JIF 2014: 9.575; CIT: 2)

28. Cao HX, Schmutzer T, Scholz U, **Pecinka A**, Schubert I, Vu GTH (2015): Metatranscriptome analysis reveals host-microbiome interactions in traps of carnivorous *Genlisea* species. ***Frontiers Microbiol*** doi: 10.3389/fmicb.2015.00526. (JIF 2014: 3.941; CIT: 1)
27. Piofczyk T, Jeena G, ***Pecinka A** (2015): *Arabidopsis thaliana* natural variation reveals connections between UV radiation stress and plant pathogen-like defense responses. ***Plant Physiol Biochem*** 93: 34-43. (JIF 2014: 2.352; CIT: 1)
26. Willing E-M, Rawat V, Mandáková T, Maumus F, James VG, Nordström KJV, Becker C, Warthmann N, Chica C, Szarzynska B, Zytnicki M, Albani MC, Kiefer C, Bergonzi S, Castaings L, Mateos JL, Berns MC, Bujdoso N, Piofczyk T, de Lorenzo L, Barrero-Sicilia C, Mateos I, Piednoël M, Hagmann J, Chen-Min-Tao R, Iglesias-Fernández R, Schuster SC, Alonso-Blanco C, Roudier F, Carbonero P, Javier Paz-Ares J, Davis SJ, **Pecinka A**, Quesneville H, Colot V, Lysak MA, Weigel D, Coupland G, Schneeberger K (2015): Genome expansion of Arabis alpina linked with retrotransposition and reduced symmetric DNA methylation. ***Nature Plants*** DOI: 10.1038/NPLANTS.2014.23. (JIF: Not yet available; CIT: 12)
25. Abdelsamad A, ***Pecinka A** (2014): Pollen-specific activation of Arabidopsis retrogenes is associated with global transcriptional reprogramming. ***Plant Cell*** 26: 3299-313. (JIF: 9.575; CIT: 3)
24. ***Pecinka A**, Liu CH (2014): Drugs for Plant Chromosome and Chromatin Research. ***Cytogenet Genome Res*** 143: 51-59. (JIF: 1.905; CIT: 2)
23. [#]Baubec T, Finke A, Mittelsten Scheid O, ***Pecinka A** (2014): Meristem-specific expression of epigenetic regulators safeguards transposon silencing in Arabidopsis. ***EMBO Rep*** 15: 446-452. *This is a Faculty of 1000Prime highlighted publication.* (JIF: 7.858; CIT: 12)
22. ***Pecinka A**, Abdelsamad A, Vu GTH (2013): Hidden genetic nature of natural epigenetic variation in plants. ***Trends Plant Sci*** 18: 625-632. (JIF: 13.479; CIT: 10)
21. Alcázar R, **Pecinka A**, Aarts MGM, Fransz PF, Koornneef M (2012): Signals of speciation within Arabidopsis thaliana in comparison with its relatives. ***Curr Opin Plant Biol*** 15:205-211. (JIF: 9.385; CIT: 3)
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