

### **Full-length sequencing of circular DNA viruses and extrachromosomal circular DNA using CIDER-Seq**

Devang Mehta, Luc Cornet, Matthias Hirsch-Hoffmann, Syed Shan-e-Ali Zaidi & Hervé Vanderschuren  
*Nature Protocols*, DOI: <https://doi.org/10.1038/s41596-020-0301-0>, 2020.

### **Haplotype-resolved genomes of geminivirus-resistant and geminivirus-susceptible African cassava cultivars.**

Kuon JE, Qi W, Schläpfer P, Hirsch-Hoffmann M, von Bieberstein PR, Patrignani A, Poveda L, Grob S, Keller M, Shimizu-Inatsugi R, Grossniklaus U, Vanderschuren H, Gruissem W.  
*BMC Biology*, DOI: [10.1186/s12915-019-0697-6](https://doi.org/10.1186/s12915-019-0697-6), 2019

### **Genome-scale, single-cell-type resolution of microRNA activities within a whole plant organ.**

Brosnan CA, Sarazin A, Lim P, Bologna NG, Hirsch-Hoffmann M, Voinnet O.  
*The EMBO Journal*, DOI: [10.15252/embj.2018100754](https://doi.org/10.15252/embj.2018100754), 2019

### **Linking CRISPR-Cas9 interference in cassava to the evolution of editing-resistant geminiviruses.**

Mehta D, Stürchler A, Anjanappa RB, Zaidi SS, Hirsch-Hoffmann M, Gruissem W, Vanderschuren H.  
*Genome Biology*, DOI: [10.1186/s13059-019-1678-3](https://doi.org/10.1186/s13059-019-1678-3), 2019

### **Diurnal changes in concerted plant protein phosphorylation and acetylation in Arabidopsis organs and seedlings.**

Uhrig RG, Schläpfer P, Roschitzki B, Hirsch-Hoffmann M, Gruissem W.  
*The Plant Journal.*, DOI: [10.1111/tpj.14315](https://doi.org/10.1111/tpj.14315), 2019.

### **A new full-length circular DNA sequencing method for viral-sized genomes reveals that RNAi transgenic plants provoke a shift in geminivirus populations in the field.**

Mehta D, Hirsch-Hoffman M, Were M, Patrignani A, Zaidi SS, Were H, Gruissem W, Vanderschuren H  
*Nucleic Acids Research*, DOI: <https://doi.org/10.1093/nar/gky914>, 2018.

### **Design and Use of a Digitally Controlled Device for Accurate, Multiplexed Gas Exchange Measurements of the Complete Foliar Parts of Plants.**

George GM, Kölling K, Kuenzli R, Hirsch-Hoffmann M, Flütsch P, Zeeman SC  
*Methods in Molecular Biology*, Clifton N.J., DOI: [https://doi.org/10.1007/978-1-4939-7786-4\\_3](https://doi.org/10.1007/978-1-4939-7786-4_3), 2018.

### **Genome-scale analysis of regulatory protein acetylation enzymes from photosynthetic eukaryotes**

R. Glen Uhrig, Pascal Schläpfer, Devang Mehta, Matthias Hirsch-Hoffmann and Wilhelm Gruissem  
*BMC Genomics*, 18: 514, BioMed Central, 2017.

### **Diurnal changes in the histone H3 signature H3K9ac|H3K27ac|H3S28p are associated with diurnal gene expression in Arabidopsis**

Katja Baerenfaller, Huan Shu, Matthias Hirsch-Hoffmann, Johannes Fütterer, Lennart Opitz, Hubert Rehrauer, Lars Hennig and Wilhelm Gruissem  
*Plant Cell & Environment*, 39 (11): 2557-2569, Oxford: Wiley-Blackwell, 2016.

### **Large-Scale Proteomics of the Cassava Storage Root and Identification of a Target Gene to Reduce Postharvest Deterioration**

Herve Vanderschuren, Evans Nyaboga, Jacquelyne S. Poon, Katja Bärenfaller, Jonas Grossmann, Matthias Hirsch-Hoffmann, Norbert Kirchgessner, Paolo Nanni and Wilhelm Gruissem  
*The plant cell*, 26 (5): 1913-1924, Rockville, MD: American Society of Plant Physiologists, 2014.

### **Protein Abundance Changes and Ubiquitylation Targets Identified after Inhibition of the Proteasome with Syringolin A**

J. Svozil, M. Hirsch-Hoffmann, R. Dudler, W. Gruissem and K. Baerenfaller

*Molecular & cellular proteomics*, 13 (6): 1523-1536, Bethesda, MD: American Society for Biochemistry and Molecular Biology, 2014.

### **Systems-based analysis of Arabidopsis leaf growth reveals adaptation to water deficit**

Katja Baerenfaller, Catherine Massonnet, Sean Walsh, Sacha Baginsky, Peter Bühlmann, Lars Hennig, Matthias Hirsch-Hoffmann, Katharine A. Howell, Sabine Kahlau, Amandine Radziejwoski, Doris Russenberger, Dorothea Rutishauser, Ian Small, Daniel Stekhoven, Ronan Sulpice, Julia Svozil, Nathalie Wuyts, Mark Stitt, Pierre Hilson, Christine Granier and Wilhelm Gruissem  
*Molecular systems biology*, 8: 606, London: Nature Publ. Group, 2012.

### **pep2pro: The high-throughput proteomics data processing, analysis, and visualization tool**

Matthias Hirsch-Hoffmann, Wilhelm Gruissem and Katja Baerenfaller

*Frontiers in Plant Science*, 3: 123, Lausanne: Frontiers Media, 2012.

### **Plastid Proteome Assembly without Toc159: Photosynthetic Protein Import and Accumulation of N-Acetylated Plastid Precursor Proteins**

Sylvain Bischof, Katja Baerenfaller, Thomas Wildhaber, Raphael Troesch, Pierre-Alexandre Vidi, Bernd Roschitzki, Matthias Hirsch-Hoffmann, Lars Hennig, Felix Kessler, Wilhelm Gruissem and Sacha Baginsky

*The plant cell*, 23 (11): 3911-3928, Rockville, MD: American Society of Plant Physiologists, 2011.

### **AtIPD: A Curated Database of Arabidopsis Isoprenoid Pathway Models and Genes for Isoprenoid Network Analysis**

Eva Vranová, Matthias Hirsch-Hoffmann and Wilhelm Gruissem

*Plant physiology*, 156 (4): 1655-1660, Rockville, MD: American Society of Plant Physiologists, 2011.

### **MASCP Gator: An Aggregation Portal for the Visualization of Arabidopsis Proteomics Data**

Hiren J. Joshi, Matthias Hirsch-Hoffmann, Katja Baerenfaller, Wilhelm Gruissem, Sacha Baginsky, Robert Schmidt, Waltraud X. Schulze, Qi Sun, Klaas J. van Wijk, Volker Egelhofer, Stefanie Wienkoop, Wolfram Weckwerth, Christophe Bruley, Norbert Rolland, Tetsuro Toyoda, Hirofumi Nakagami, Alexandra M. Jones, Steven P. Briggs, Ian Castleden, Sandra K. Tanz, A. Harvey Millar and Joshua L. Heazlewood

*Plant physiology*, 155 (1): 259-270, Rockville, MD: American Society of Plant Physiologists, 2011.

### **pep2pro: A new tool for comprehensive proteome data analysis to reveal information about organ-specific proteomes in Arabidopsis thaliana**

Katja Baerenfaller, Matthias Hirsch-Hoffmann, Julia Svozil, Roger Hull, Doris Russenberger, Sylvain Bischof, Qingtao Lu, Wilhelm Gruissem and Sacha Baginsky

*Integrative biology*, 3 (3): 225-237, New York, NY, USA: Wiley-Liss, 2011.

### **Genome-scale proteomics reveals Arabidopsis thaliana gene models and proteome dynamics**

Katja Bärenfaller, Jonas Grossmann, Monica A. Grobei, Roger Hull, Matthias Hirsch-Hoffmann, Shaul Yalovsky, Philip Zimmermann, Ueli Grossniklaus, Wilhelm Gruissem and Sacha Baginsky  
*Science*, 320 (5878): 938-941, Washington, DC: American Association for the Advancement of Science, 2008.

### **PlantDB: a versatile database for managing plant research**

Vivien Exner, Matthias Hirsch-Hoffmann, Wilhelm Gruissem and Lars Hennig

*Plant methods*, 4 (1): 1-5, [s.l.]: BioMed Central, 2008.

### **Proteome dynamics during plastid differentiation in rice**

Torsten Kleffmann, Anne von Zychlinski, Doris Russenberger, Matthias Hirsch-Hoffmann, Peter Gehrig, Wilhelm Gruissem and Sacha Baginsky

*Plant physiology*, 143 (2): 912-923, Rockville, MD: American Society of Plant Physiologists, 2007.

### **Web-based analysis of the mouse transcriptome using Genevestigator**

Oliver Laule, Matthias Hirsch-Hoffmann, Tomas Hruz, Wilhelm Gruissem and Philip Zimmermann

*BMC Bioinformatics*, 7: 311, London: BioMed Central, 2006.

### **plprot: A Comprehensive Proteome Database for Different Plastid Types**

Torsten Kleffmann, Matthias Hirsch-Hoffmann, Wilhelm Gruissem and Sacha Baginsky

*Plant & cell physiology*, 47 (3): 432-436, Tokyo: Japanese Society of Plant Physiologists, 2006.

### **Plant proteomics: From functional proteomics to genome annotation**

J. Grossmann, F. Roos, E. Bermueller, T. Kleffmann, M.A. Siddique, A. Von Zychlinski, D.

Russenberger, M. Hirsch-Hoffmann, W. Gruissem and S. Baginsky

Bad Ragaz: Swiss Committee for Molecular Biology, 2006.

### **Reducing Java internet project risks: A case study of public measurement of client component functionality in the user community**

Tomas Hruz, Matthias Hirsch-Hoffmann, Wilhelm Gruissem and Philip Zimmermann

*ACM international conference proceedings series*, 178: 199-202, Mannheim: Mannheim Univ. Press, 2006.

### **GENESTIGATOR: Arabidopsis microarray database and analysis toolbox**

Philip Zimmermann and Matthias Hirsch-Hoffmann, Lars Hennig, Wilhelm Gruissem

*Plant physiology*, 136 (1): 2621-2632, Rockville, MD: American Society of Plant Physiologists, 2004.