

# Curriculum vitæ

Magnus Nordborg

August 25, 2020

## Education

**1985–1986** Swedish Defense Institute of Language / Uppsala University. Subjects: Russian language, Soviet & Eastern European Studies.

**1986–1989** B.Sc., Lund University. Majors: Biology and Mathematics. Advisor: B. O. Bengtsson.

**1989–1994** Ph.D., Department of Biological Sciences, Stanford University. Advisor: M. W. Feldman.

**1994–1997** Research Associate, Department of Ecology & Evolution, University of Chicago. Advisors: J. Bergelson, B. Charlesworth & D. Charlesworth.

## Current and Former Positions

**1997–2000** Department of Genetics, Lund University: Research Assistant Professor (“forskarassistent”).

**2000–2015** Molecular & Computational Biology, University of Southern California: Assistant Professor (2000–2004); Associate Professor (2004–2011); Research Associate Professor (2011–2015).

**2009–** Gregor Mendel Institute, Austrian Academy of Sciences, Vienna: Scientific Director.

## Awards & Honors

- Alfred P. Sloan Research Fellow (2003–2005).
- Fellow of the AAAS (elected 2010).
- Corresponding Member of the Austrian Academy of Sciences (elected 2013).
- EMBO Member (elected 2015).

## Research Grants

### Past support (last five years)

**2011–2014** “Starting from scratch: adaptation to variable environments after an extreme bottleneck”, DFG SPP 1529, total amount for GMI component €228,510 (joint proposal with Weigel, MPI).

**2009–2014** “Integrated Genetic and Genomic Resources for a Model System”, NIH 2 R01 RR016300-07, total amount \$2,841,375 (Investigator, minor fraction of budget [PI: Freimer, UCLA]).

**2009–2014** “Genomic analysis of the genotype-phenotype map”, NIH 2 P50 HG002790-06, total amount \$12,201,508 (Investigator, major fraction of budget [PI: Tavaré, USC]).

**2011–2015** “Trans-national Infrastructure for Plant Genomic Science”, EC FP7 Proposal No 283496 – transPLANT, total amount for GMI component €321,830 (PI on sub-award [PI: Kersey, EBI]).

**2011–2016** “Developing maximum-resolution genotype-phenotype maps using whole-genome polymorphism data”, ERC-2010-AdG Proposal No 268962 – MAXMAP, total amount €2,183,956 (PI).

**2014–2016** “Adaptation after bottlenecks”, DFG SPP 1529, total amount for GMI component €200,000 (joint proposal with Neuffer, Osnabrück and Weigel, MPI).

### Current support

**2018–2020** “1001 Genomes+”, ERA-CAPS (FWF I 3684-B25), total amount for GMI component €355,542 (joint project with Paul Kersey, EBI, and Detlef Weigel, MPI).

**2018–2023** “Elucidating the causes and consequences of the global pattern of epigenetic variation in *Arabidopsis thaliana*”, ERC-2017-AdG 789037 – EPICLINES, total amount €2,498,468 (PI)

## Invited Presentations (last five years)

### 2015

1. Cologne Spring Meeting (invited speaker), Cologne, Germany
2. 26th International Conference on Arabidopsis Research (invited speaker), Paris, France.
3. Linnean Centre Network Meeting (keynote speaker), Uppsala, Sweden.
4. 11th International Congress of Plant Molecular Biology (keynote speaker), Iguazú Falls, Brazil.
5. Zürich-Basel Plant Sciences Center symposium “Unlocking the potential of diversity” (invited speaker), Zürich, Switzerland.

### 2016

1. Bioinformatics Research Centre (departmental speaker), Aarhus University, Aarhus, Denmark.
2. Keystone Symposium “Plant Epigenetics: From Genotype to Phenotype” (invited speaker), Taos, New Mexico.
3. Evolutionary Genetics and Genomics Symposium (invited speaker), Cambridge University, Cambridge.
4. INRA Montpellier (departmental speaker), Montpellier, France.
5. Workshop on the biology of variation (invited participant), Fondation des Treilles, Les Treilles, France.
6. EMBL-Wellcome Genome Campus Conference “Big Data in Biology and Health” (invited speaker), EMBL, Heidelberg, Germany.
7. Jacques Monod Conference “Evolutionary genomics and systems biology: bringing together theoretical and experimental approaches” (speaker), Roscoff, France.

- EMBO Members' meeting (inaugural talk), EMBL, Heidelberg, Germany.
- World Life Science Conference (invited speaker), Beijing, China.
- The 8th International Symposium on Plant Senescence (keynote speaker), Jeju Island, South Korea.
- Robert Hill Seminar (invited speaker), University of Sheffield, Sheffield, England.
- 5th Conference on Plant Genome Evolution, Sitges, Spain (keynote speaker).
- SciLifeLab The Svedberg Seminar, Uppsala University, Uppsala, Sweden (invited speaker).
- Workshop on Polygenic Scores and their Applications, New York Genome Center, New York, New York, USA (invited speaker).

## 2017

- Winter School on Plant Biotechnology and Environmental Sustainability (lecturer), University of Verona, Alba di Canazei, Italy.
- Gordon Research Conference "Ecological & Evolutionary Genomics", Biddeford, Maine, USA.
- Mini-Symposium on Biomedical Big Data (invited speaker), Guizhou Normal University, Guiyang, China.
- The Earlham Institute (invited speaker), Norwich, UK.
- EMBO-EMBL Symposium: The Mobile Genome (invited speaker), Heidelberg, Germany.
- Institute of Botany, Chinese Academy of Sciences (departmental speaker), Beijing, China.
- Agricultural Genomics 2017 (invited speaker), Huazhong Agricultural University, Wuhan, China.
- Department of Plant and Microbial Biology (departmental speaker), University of Zürich, Zürich, Switzerland.

## 2018

- Lausanne Genomics Days (invited speaker), University of Lausanne, Lausanne, Switzerland.
- Third Bangalore School on Population Genetics and Evolution (invited lecturer), International Centre for Theoretical Sciences, Bangalore, India.
- 60th Annual Maize Genetics Conference (plenary speaker), Saint-Malo, France.
- II Joint Congress on Evolutionary Biology (speaker), Montpellier, France.
- 62nd Annual Congress of the Italian Society of Agricultural Genetics (invited speaker), Verona, Italy.
- 41st Annual Meeting of the Molecular Biology Society of Japan, Yokohama, Japan (invited speaker).
- National Institute of Genetics, Mishima, Japan (departmental speaker).

## 2019

- Cambridge Epigenetics Club, Cambridge University, Cambridge, UK (invited speaker).
- Department of Bioscience, Aarhus University, Aarhus, Denmark (departmental speaker).
- Bi-annual Tri-National Arabidopsis Conference, Zürich, Switzerland (invited speaker).
- Weizmann Institute, Rehovot, Israel (invited speaker).
- "At the forefront of plant research", Centre de Recerca en Agrigenòmica (CRAG), Barcelona, Spain (invited speaker).
- Department of Botany and Plant Sciences, University of California, Riverside, California, USA (invited speaker).
- Salk Integrative Biology Symposium, Salk Institute, La Jolla, California, USA (invited speaker).

## 2020

- 2020 Workshop on Population and Speciation Genomics, Český Krumlov, Czechia (invited lecturer).
- 2020 Future Biotech Winter Retreat, Novosibirsk, Russia (invited lecturer).
- "The Biology of Genomes", Cold Spring Harbor Laboratories, New York, USA (session chair [virtual due to Covid-19]).
- "Virtual Black Forest Summer School: Plant Ecological Epigenetics" (keynote speaker).

## Teaching Experience

### At Lund University

- 1997** Introductory Biology (lecturer).  
**1997** Molecular Evolution (lecturer).  
**1997–1999** Population Genetics (lecturer).  
**1998** Graduate course in genetic analysis (lecturer & organizer).

### At University of Southern California

- BISC 313** "Population Genetics & Evolution" (co-taught class, 2002–2003).  
**BISC 325** "Genetics" (co-taught class, 2004, 2006, 2008).  
**BISC 403** "Advanced Molecular Genetics" (co-taught class, 2000–2002).  
**BISC 499** "Population Genetics & Molecular Evolution" (co-taught class, 2004, 2008).  
**BISC 542** "Seminar in Molecular Biology" (co-taught class, 2001–2003).  
**BISC 502a** "Molecular Genetics & Biochemistry" (lecturer, 2004).  
**BISC 502b** "Molecular Genetics & Biochemistry" (lecturer, 2001–2002, 2006–2007).  
**BISC 505** "Genomics & Molecular Genetics" (lecturer, 2001).  
**BISC 510b** Evolutionary Biology (lecturer, 2003–2007).  
**BISC 549** Seminar in Integrative & Evolutionary Biology (lecturer, 2003–2007; organizer 2006).  
**MATH 577b** "Computational Molecular Biology Laboratory" (lecturer, 2001–2002).

## Advisory Experience

### Former doctoral students

- Jenny Hagenblad (1998–2002), Associate Professor, Linköping University
- Badri Padhukasahasram (2002–2006), Postdoc, Cornell University
- Chunlao Tang (2001–2006), Postdoc, CSHL.
- Sung Kim (2002–2006), Postdoc, UCSF.

5. Keyan Zhao (2003–2007), Postdoc, Cornell University.
6. Tina Hu (2002–2008), Postdoc, Princeton University.
7. Yu Huang (2007–2010), Postdoc, UCLA.
8. Liz Cooper (2005–2011), Postdoc, University of Miami.
9. Bjarni Vilhjálmsson (2007–2011), Postdoc, Harvard University.
10. Pei Zhang (2008–2014), Research staff, AstraZeneca.
11. Dazhe Meng (2008–2015), Programmer, Google.
12. Polina Novikova (2011–2016), Postdoc, Ghent University.
13. Envel Kerdaffrec (2010–2017), Postdoc, University of Fribourg.
14. Fernando Rabanal (2010–2017), Postdoc, Max Planck Institute, Tübingen.
21. Matt Horton (2013–2015), Research Fellow, University of Zürich, Switzerland.
22. Cheng-Ruei Lee (2014–2016), Assistant Professor, National Taiwan University, Taipei, Taiwan.
23. Eriko Sasaki (2012–2020), Associate Professor, Kyushu University, Kyushu, Japan.

#### Current postdocs

1. Daniele Filiault (2010–).
2. Benjamin Jaegle (2015–).
3. Pieter Clauw (2015–).
4. Alexandra Kornienko (2017–).
5. Tom Ellis (2018–).
6. Haijun Liu (2019–).
7. Yoav Voichkek (2020–).

#### Current doctoral students

1. Gökçe Aköz (2013–).
2. Robin Burns (2014–).
3. Mayela Soto Jimenez (2015–).
4. Rahul Pisupati (2017–).
5. Dejan Đukić (2018–).

#### Former postdocs

1. Hideki Innan (2001–2002), Associate Professor, Graduate University for Advanced Studies, Hayama.
2. Yoko Ishino (2002–2003), Associate Professor, Hiroshima University.
3. Honggang Zheng (2001–2004), Group Leader, Cargill Specialty Canola Oils.
4. Noah Rosenberg (with Simon Tavaré, 2001–2005), Associate Professor, Stanford University.
5. María José Aranzana (2002–2005), Postdoc, CSIC-IRTA, Barcelona.
6. Christopher Toomajian (2003–2008), Assistant Professor, Kansas State University.
7. Tom Turner (2009), Assistant Professor, UCSB.
8. Glenda Willems (2007–2009), Postdoc, MPI, Cologne.
9. Marc Rehmsmaier (2009–2011), Group Leader, Computational Biology Unit, University of Bergen.
10. Susanna Atwell (2006–2011), Postdoc, UC Davis.
11. Vincent Segura (2010–2011), Researcher, INRA, Orléans.
12. Alex Platt (2008–2011), Postdoc, UCLA.
13. Quan Long (2009–2012), Researcher, Mount Sinai School of Medicine.
14. Qingrun Zhang (2010–2012), Postdoc, Mount Sinai School of Medicine.
15. Marie-Stanislas Remigerau (2009–2013), Research Associate, USC.
16. Takashi Tsuchimatsu (2012–2014), Assistant Professor, University of Tokyo.
17. Manu Dubin (2012–2015), Researcher, Bayer Crop-Science.
18. Hannes Svoldal (2012–2015), Research Professor, U. Antwerpen, Antwerpen, Belgium.
19. Ashley Farlow (2011–2015), Research Associate, U. Melbourne, Australia.
20. Arthur Korte (2010–2015), Assistant Professor, University of Würzburg, Germany.

#### Service

#### Journals

- Editorial Board Member, *Genome Biology* (2017–).
- Editor, *eLife* (2014–).
- Associate Editor, *Plant Cell* (2006–2008).
- Associate Editor, *Genetics* (2004–2009).
- Associate Editor, *J. Mol. Evol.* (2001–2007).
- Regular reviewer for a number of journals, including *Amer. J. Hum. Genet.*, *Curr. Biol.*, *Genetics*, *Genome Biol.*, *Genome Res.*, *Nature*, *Nature Genetics*, *PNAS*, *PLoS Biol.*, *PLoS Genet.*, and *Science*.
- Member, Faculty of 1000, Section on Evolutionary/Comparative Genetics (2004–2011).
- Head, Faculty of 1000, Section on Plant Genomes & Evolution (2011–2014).

#### Funding agencies

- NSF Panel Member (2003).
- USDA-NRI Panel Member (2004).
- Temporary Member, NIH Genome Study Section (2004).
- ERC LS2 Starting Grant Panel (Member 2013–2017, Chair 2019).
- External reviewer of proposals for a number of agencies, including NSF, ERC, and the Wellcome Trust.

#### Policy workshops

- NSF Plant Cyber-infrastructure Workshop (2005).
- NRC workshop on the National Plant Genome Initiative, Washington, DC (2007).
- NSF workshop on the future of Arabidopsis research, Washington, DC (2008).
- EC-US Task Force on Biotechnology Research workshop “Genomes to Germplasm” (2013), INRA, Versailles, France.

#### Advisory boards and committees

- External reviewing committee, Department of Evolutionary Genetics, Max Planck Institute for Evolutionary Anthropology (2003).
- SAB, NSF project “Molecular and Functional Diversity of the Maize Genome”, John Doebley, PI (2004–2006).

- Various committees at USC, including hiring, admissions, and the Provost’s advisory group on bioinformatics.
- SAB, Umeå Plant Science Center (2011–2015).
- SAB, IAIC/Araport (2012–2016).
- SAB, Arabidopsis Biological Resource Center (2012–2015).
- SAB, Cluster of Excellence on Plant Sciences (CEPLAS) (2012–2018).
- SAB, EU FP7 project “RADIANT” (2013–2015).
- SAB, CAS-MPG Partner Institute for Computational Biology, Shanghai (2013–).
- SAB, NSF Plant Genome Project “Biology of Rare Alleles in Maize and Its Wild Relatives”, Ed Buckler, PI (2014–2017).
- SAB, NSF Plant Genome Project “PanAnd – Harnessing convergence and constraint to predict adaptations to abiotic stress for maize and sorghum”, Ed Buckler, PI (2020–2022).

## Publications

### Preprints

- [1] Robin Burns, Terezie Mandáková, Terezieková, Joanna Jagoda, Luz Mayela Soto-Jiménez, Chang Liu, Martin A Lysak, Polina Yu. Novikova, and Magnus Nordborg. Gradual evolution of allopolyploidy in *Arabidopsis suecica*. *bioRxiv*, 264432, 25 August 2020.
- [2] Benjamin Brachi, Daniele Filiault, Paul Darne, Marine Le Mentec, Envel Kerdaffrec, Fernando Rabanal, Alison Anastasio, Matthew Box, Susan Duncan, Timothy Morton, Polina Novikova, Matthew Perisin, Takashi Tsuchimatsu, Roderick Woolley, Man Yu, Caroline Dean, Magnus Nordborg, Svante Holm, and Joy Bergelson. Plant genes influence microbial hubs that shape beneficial leaf communities. *bioRxiv*, 181198, 26 August 2017.

### Research articles

- [1] Ruben Gutzat, Klaus Rembart, Thomas Nussbaumer, Falko Hofmann, Rahul Pisupati, Gabriele Bradamante, Nina Daubel, Angelika Gaidora, Nicole Lettner, Mattia Donà, Magnus Nordborg, Michael Nodine, and Ortrun Mittelsten Scheid. Arabidopsis shoot stem cells display dynamic transcription and DNA methylation patterns. *EMBO J.*, e103667, 2020.
- [2] Takashi Tsuchimatsu, Hiroyuki Kakui, Misako Yamazaki, Cindy Marona, Hiroki Tsutsui, Afif Hedhly, Dazhe Meng, Yutaka Sato, Thomas Städler, Ueli Grossniklaus, Masahiro M Kanaoka, Michael Lenhard, Magnus Nordborg, and Kentaro K Shimizu. Adaptive reduction of male gamete number in the selfing plant *Arabidopsis thaliana*. *Nat. Commun.*, 11:2885, 2020.
- [3] Eriko Sasaki, Taiji Kawakatsu, Joseph R. Ecker, and Magnus Nordborg. Common alleles of *CMT2* and *NRPE1* are major determinants of CHH methylation variation in *Arabidopsis thaliana*. *PLoS Genet.*, 15:e1008492, 2019.

- [4] Gökçe Aköz and Magnus Nordborg. The *Aquilegia* genome reveals a hybrid origin of core eudicots. *Genome Biol.*, 20:256, 2019.
- [5] Matteo Togninalli, Ümit Seren, Jan A Freudenthal, J Grey Monroe, Dazhe Meng, Magnus Nordborg, Detlef Weigel, Karsten Borgwardt, Arthur Korte, and Dominik G Grimm. AraPheno and the AraGWAS Catalog 2020: a major database update including RNA-Seq and knockout mutation data for *Arabidopsis thaliana*. *Nucleic Acids Res.*, 2019.
- [6] Dorota Duszynska, Bjarni Vilhjálmsson, Rosa Castillo Bravo, Sandesh Swamidatta, Thomas E Juenger, Mark T A Donoghue, Aurélie Comte, Magnus Nordborg, Timothy F Sharbel, Galina Brychkova, Peter C McKeown, and Charles Spillane. Transgenerational effects of inter-ploidy cross direction on reproduction and F2 seed development of *Arabidopsis thaliana* F1 hybrid triploids. *Plant Reprod.*, 32:275–289, 2019.
- [7] Matthias Nagler, Thomas Nägele, Christian Gilli, Lena Fragner, Arthur Korte, Alexander Platzer, Ashley Farlow, Magnus Nordborg, and Wolfram Weckwerth. Ecometabolomics and metabolic modelling: making the leap from model systems in the lab to native populations in the field. *Front. Plant Sci.*, 2018.
- [8] Danièle L Filiault, Evangeline S Ballerini, Terezie Mandáková, Gökçe Aköz, Nathan J Derieg, Jeremy Schmutz, Jerry Jenkins, Jane Grimwood, Shengqiang Shu, Richard D Hayes, Uffe Hellsten, Kerrie Barry, Juying Yan, Sirma Mihaltcheva, Miroslava Karafiátová, Viktoria Nizhynska, Elena M Kramer, Martin A Lysak, Scott A Hodges, and Magnus Nordborg. The *Aquilegia* genome provides insight into adaptive radiation and reveals an extraordinarily polymorphic chromosome with a unique history. *Elife*, 7, 2018.
- [9] Eriko Sasaki, Florian Frommlet, and Magnus Nordborg. GWAS with heterogeneous data: Estimating the fraction of phenotypic variation mediated by gene expression data. *G3*, 2018.
- [10] Envel Kerdaffrec and Magnus Nordborg. The maternal environment interacts with genetic variation in regulating seed dormancy in Swedish *Arabidopsis thaliana*. *PLoS One*, 12:e0190242, 2017.
- [11] Rahul Pisupati, Ilka Reichardt, Ümit Seren, Pamela Korte, Viktoria Nizhynska, Envel Kerdaffrec, Kristina Uzunova, Fernando A Rabanal, Daniele L Filiault, and Magnus Nordborg. Verification of arabidopsis stock collections using SNPmatch, a tool for genotyping highplexed samples. *Sci Data*, 4:170184, 2017.
- [12] Matteo Togninalli, Ümit Seren, Dazhe Meng, Joffrey Fitz, Magnus Nordborg, Detlef Weigel, Karsten Borgwardt, Arthur Korte, and Dominik Grimm. The AraGWAS Catalog: A curated and standardized *Arabidopsis thaliana* GWAS catalog. *Nucleic Acids Res.*, 2017.
- [13] Hannes Svoldal, Anna Jasinska, Cristian Apetrei, Giovanni Coppola, Yu Huang, Christopher Schmitt, Beatrice Jacquelin, Michaela Müller-Trutwin, George Weinstock, Paul Grobler, Richard Wilson, Trudy Turner,

- Wesley Warren, Nelson Freimer, and Magnus Nordborg. Ancient hybridization and strong adaptation to viruses across African vervet monkey populations. *Nat. Genet.*, 2017.
- [14] Takashi Tsuchimatsu, Pauline M Goubet, Sophie Gallina, Anne-Catherine Holl, Isabelle Fobis-Loisy, H el ene Berg es, William Marande, Elisa Prat, Dazhe Meng, Quan Long, Alexander Platzer, Magnus Nordborg, Xavier Vekemans, and Vincent Castric. Patterns of polymorphism at the self-incompatibility locus in 1,083 *Arabidopsis thaliana* genomes. *Mol. Biol. Evol.*, 2017.
- [15] Fernando A Rabanal, Terezie Mand akova, Luz M Soto-Jim enez, Robert Greenhalgh, David L Parrott, Stefan Lutzmayer, Joshua G Steffen, Viktoria Nizhynska, Richard Mott, Martin A Lysak, Richard M Clark, and Magnus Nordborg. Epistatic and allelic interactions control expression of ribosomal RNA gene clusters in *Arabidopsis thaliana*. *Genome Biol.*, 18:75, 2017.
- [16] Fernando A Rabanal, Viktoria Nizhynska, Terezie Mand akova, Polina Yu Novikova, Martin A Lysak, Richard Mott, and Magnus Nordborg. Unstable inheritance of 45S rRNA genes in *Arabidopsis thaliana*. *G3*, 2017.
- [17] Martha Imprialou, Andr e Kahles, Joshua G Steffen, Edward J Osborne, Xiangchao Gan, Janne Lempe, Amarjit Bhomra, Eric Belfield, Anne Visscher, Robert Greenhalgh, Nicholas P Harberd, Richard Goram, Jotun Hein, Alexandre Robert-Seilaniantz, Jonathan Jones, Oliver Stegle, Paula Kover, Miltos Tsiantis, Magnus Nordborg, Gunnar Ratsch, Richard M Clark, and Richard Mott. Genomic rearrangements in *Arabidopsis* considered as quantitative traits. *Genetics*, 2017.
- [18] Cheng-Ruei Lee, Hannes Svoldal, Ashley Farlow, Moises Exposito-Alonso, Wei Ding, Polina Novikova, Carlos Alonso-Blanco, Detlef Weigel, and Magnus Nordborg. On the post-glacial spread of human commensal *Arabidopsis thaliana*. *Nat. Commun.*, 8:14458, 2017.
- [19] Polina Yu Novikova, Takashi Tsuchimatsu, Samson Simon, Viktoria Nizhynska, Viktor Voronin, Robin Burns, Olga M Fedorenko, Svante Holm, Torbj orn Sall, Elisa Prat, William Marande, Vincent Castric, and Magnus Nordborg. Genome sequencing reveals the origin of the allotetraploid *Arabidopsis suecica*. *Mol. Biol. Evol.*, 2017.
- [20] Envel Kerdaffrec, Dani ele L Filiault, Arthur Korte, Eriko Sasaki, Viktoria Nizhynska,  mit Seren, and Magnus Nordborg. Multiple alleles at a single locus control seed dormancy in Swedish *Arabidopsis*. *Elife*, 5:e22502, 2016.
- [21]  mit Seren, Dominik Grimm, Joffrey Fitz, Detlef Weigel, Magnus Nordborg, Karsten Borgwardt, and Arthur Korte. AraPheno: A public database for *Arabidopsis thaliana* phenotypes. *Nucleic Acids Res.*, 2016.
- [22] J Matthew Watson, Alexander Platzer, Anita Kazda, Svetlana Akimcheva, Sona Valuchova, Viktoria Nizhynska, Magnus Nordborg, and Karel Riha. Germline replications and somatic mutation accumulation are independent of vegetative life span in *Arabidopsis*. *Proc. Natl. Acad. Sci. USA*, 2016.
- [23] Matthew W Horton, Glenda Willems, Eriko Sasaki, Maarten Koornneef, and Magnus Nordborg. The genetic architecture of freezing tolerance varies across the range of *Arabidopsis thaliana*. *Plant Cell Environ.*, 2016.
- [24] Paul Fransz, Gabriella Linc, Cheng-Ruei Lee, Saulo Alves Aflitos, Jesse R Lasky, Christopher Toomajian, Ali Hoda, Janny Peters, Peter van Dam, Xianwen Ji, Mateusz Kuzak, Tom Gerats, Ingo Schubert, Korbinian Schneeberger, Vincent Colot, Rob Martienssen, Maarten Koornneef, Magnus Nordborg, Thomas E Juenger, Hans de Jong, and M Eric Schranz. Molecular, genetic and evolutionary analysis of a paracentric inversion in *Arabidopsis thaliana*. *Plant J.*, 2016.
- [25] Polina Yu Novikova, Nora Hohmann, Viktoria Nizhynska, Takashi Tsuchimatsu, Jamshaid Ali, Graham Muir, Alessia Guggisberg, Tim Paape, Karl Schmid, Olga M Fedorenko, Svante Holm, Torbj orn Sall, Christian Schl oterer, Karol Marhold, Alex Widmer, Jun Sese, Kentaro K Shimizu, Detlef Weigel, Ute Kramer, Marcus A Koch, and Magnus Nordborg. Sequencing of the genus *Arabidopsis* identifies a complex history of nonbifurcating speciation and abundant trans-specific polymorphism. *Nat. Genet.*, 48:1077–1082, 2016.
- [26] Taiji Kawakatsu, Shao-Shan Carol Huang, Florian Jupe, Eriko Sasaki, Robert J Schmitz, Mark A Urich, Rosa Castanon, Joseph R Nery, Cesar Barragan, Yupeng He, Huaming Chen, Manu Dubin, Cheng-Ruei Lee, Cong-mao Wang, Felix Bemm, Claude Becker, Ryan O’Neil, Ronan C O’Malley, Danjuma X Quarless, The 1001 Genomes Consortium, Nicholas J. Schork, Detlef Weigel, Magnus Nordborg, and Joseph R Ecker. Epigenomic diversity in a global collection of *Arabidopsis thaliana* accessions. *Cell*, 166:492–505, 2016.
- [27] The 1001 Genomes Consortium. 1,135 genomes reveal the global pattern of polymorphism in *Arabidopsis thaliana*. *Cell*, 166:481–491, 2016.
- [28] Dazhe Meng, Manu Dubin, Pei Zhang, Edward J Osborne, Oliver Stegle, Richard M Clark, and Magnus Nordborg. Limited contribution of DNA methylation variation to expression regulation in *Arabidopsis thaliana*. *PLoS Genet.*, 12:e1006141, 2016.
- [29] Eriko Sasaki, Pei Zhang, Susanna Atwell, Dazhe Meng, and Magnus Nordborg. “Missing” G x E variation controls flowering time in *Arabidopsis thaliana*. *PLOS Genet.*, 11:e1005597, 2015.
- [30] Ashley Farlow, H. Long, S. Arnoux, W. Sung, T. G. Doak, M. Nordborg, and M. Lynch. The spontaneous mutation rate in the Fission Yeast *Schizosaccharomyces pombe*. *Genetics*, 2015.
- [31] Wesley C Warren, Anna J Jasinska, Raquel Garcia-perez, Hannes Svoldal, Chad Tomlinson, Mariano Rocchi, Nicoletta Archidiacono, Oronzo Capozzi, Patrick

- Minx, Michael J Montague, Kim Kyung, Ladeana W Hillier, Milinn Kremitzki, Tina Graves, Colby Chiang, Jennifer Hughes, Nam Tran, Yu Wang, Vasily Ramensky, Oi-wa Choi, Yoon J Jung, Christopher A Schmitt, Nikola Juretic, Jessica Wasserscheid, Trudy R Turner, Roger W Wiseman, Jennifer J Tuscher, Julie A Karl, Jörn E Schmitz, Roland Zahn, David H O'Connor, Eugene Redmond, Alex Nisbett, Béatrice Jacquelin, Michaela C Müller-Trutwin, Jason M Brenchley, Michel Dione, Martin Antonio, Gary P Schroth, Jay R Kaplan, Matthew J Jorgensen, Gregg WC Thomas, Matthew W Hahn, Brian Raney, Bronwen Aken, Juergen Schmitz, Gennady Churakov, Angela Noll, Roscoe Stanyon, David Webb, Françoise Thibaud-Nissen, Magnus Nordborg, Tomas Marques-Bonet, Ken Dewar, George M Weinstock, Richard K Wilson, and Nelson B Freimer. The genome of the vervet (*Chlorocebus aethiops sabaues*). *Genome Res.*, 4, 2015.
- [32] Manu J. Dubin, Pei Zhang, Dazhe Meng, Marie-Stanislas Remigereau, Edward J. Osborne, Francesco Paolo Casale, Philipp Drewe, André Kahles, Geraldine Jean, Bjarni Vilhjálmsson, Joanna Jagoda, Selen Irez, Viktor Voronin, Qiang Song, Quan Long, Gunnar Rättsch, Oliver Stegle, Richard M. Clark, and Magnus Nordborg. DNA methylation variation in *Arabidopsis* has a genetic basis and shows evidence of local adaptation. *eLife*, 2015.
- [33] N. Fulcher, A. Teubenbacher, E. Kerdaffrec, A. Farlow, M. Nordborg, and K. Riha. Genetic architecture of natural variation of telomere length in *Arabidopsis thaliana*. *Genetics*, 2014.
- [34] Matthew W Horton, Natacha Bodenhausen, Kathleen Beilsmith, Dazhe Meng, Brian D. Muegge, Sathish Subramanian, M. Madlen Vetter, Bjarni J. Vilhjálmsson, Magnus Nordborg, Jeffrey I. Gordon, and Joy Bergelson. Genome-wide association study of *Arabidopsis thaliana* leaf microbial community. *Nat. Commun.*, 5:5320, 2014.
- [35] Christian D Huber, Magnus Nordborg, Joachim Hermisson, and Ines Hellmann. Keeping it local: Evidence for positive selection in Swedish *Arabidopsis thaliana*. *Mol. Biol. Evol.*, 31:3026–39, 2014.
- [36] Peijin Li, Daniele Filiault, Mathew S. Box, Envel Kerdaffrec, Cock van Oosterhout, Amity M. Wilczek, Johanna Schmitt, Mark McMullan, Joy Bergelson, Magnus Nordborg, and Caroline Dean. Multiple *FLC* haplotypes defined by independent *cis*-regulatory variation underpin life history diversity in *Arabidopsis thaliana*. *Genes Dev.*, 28:1635–40, 2014.
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