

# Curriculum vitae

Magnus Nordborg

June 22, 2022

## 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)

- 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).

### Current support

- 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)

### 2017

1. Winter School on Plant Biotechnology and Environmental Sustainability (lecturer), University of Verona, Alba di

Canazei, Italy.

2. Gordon Research Conference “Ecological & Evolutionary Genomics”, Biddeford, Maine, USA.
3. Mini-Symposium on Biomedical Big Data (invited speaker), Guizhou Normal University, Guiyang, China.
4. The Earlham Institute (invited speaker), Norwich, UK.
5. EMBO-EMBL Symposium: The Mobile Genome (invited speaker), Heidelberg, Germany.
6. Institute of Botany, Chinese Academy of Sciences (departmental speaker), Beijing, China.
7. Agricultural Genomics 2017 (invited speaker), Huazhong Agricultural University, Wuhan, China.
8. Department of Plant and Microbial Biology (departmental speaker), University of Zürich, Zürich, Switzerland.

### 2018

1. Lausanne Genomics Days (invited speaker), University of Lausanne, Lausanne, Switzerland.
2. Third Bangalore School on Population Genetics and Evolution (invited lecturer), International Centre for Theoretical Sciences, Bangalore, India.
3. 60th Annual Maize Genetics Conference (plenary speaker), Saint-Malo, France.
4. II Joint Congress on Evolutionary Biology (speaker), Montpellier, France.
5. 62nd Annual Congress of the Italian Society of Agricultural Genetics (invited speaker), Verona, Italy.
6. 41st Annual Meeting of the Molecular Biology Society of Japan, Yokohama, Japan (invited speaker).
7. National Institute of Genetics, Mishima, Japan (departmental speaker).

### 2019

1. Cambridge Epigenetics Club, Cambridge University, Cambridge, UK (invited speaker).
2. Department of Bioscience, Aarhus University, Aarhus, Denmark (departmental speaker).
3. Bi-annual Tri-National Arabidopsis Conference, Zürich, Switzerland (invited speaker).
4. Weizmann Institute, Rehovot, Israel (invited speaker).
5. “At the forefront of plant research”, Centre de Recerca en Agrigenòmica (CRAG), Barcelona, Spain (invited speaker).
6. Department of Botany and Plant Sciences, University of California, Riverside, California, USA (invited speaker).
7. Salk Integrative Biology Symposium, Salk Institute, La Jolla, California, USA (invited speaker).
8. 5th Conference on Plant Genome Evolution, Sitges, Spain (keynote speaker).

9. SciLifeLab The Svedberg Seminar, Uppsala University, Uppsala, Sweden (invited speaker).
10. Workshop on Polygenic Scores and their Applications, New York Genome Center, New York, New York, USA (invited speaker).

## 2020

1. 2020 Workshop on Population and Speciation Genomics, Český Krumlov, Czechia (invited lecturer).
2. 2020 Future Biotech Winter Retreat, Novosibirsk, Russia (invited lecturer).
3. “The Biology of Genomes”, Cold Spring Harbor Laboratories, New York, USA (session chair [virtual due to Covid-19]).
4. “Virtual Black Forest Summer School: Plant Ecological Epigenetics” (keynote speaker).
5. Carnegie Institution for Science, Department of Plant Biology, Stanford, California, USA (webinar).

## 2021

1. Bioinformatics Interdepartmental Program and Department of Human Genetics, University of California, Los Angeles, USA (webinar).
2. “Evolgenome” seminar series in memory of Richard Lewontin, Stanford Center for Computational, Evolutionary and Human Genomics, Stanford, California, USA (webinar).

## 2022

1. Institut de Biologie de l’Ecole Normale Supérieure, Paris, France (departmental speaker).
2. Population, Evolutionary, and Quantitative Genetics Conference 2022, Genetics Society of America, Asilomar, California, USA (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

1. Jenny Hagenblad (1998–2002), Associate Professor, Linköping University
2. Badri Padhukasahasram (2002–2006), Postdoc, Cornell University
3. Chunlao Tang (2001–2006), Postdoc, CSHL.
4. 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 Vilhjálmsón (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.
15. Gökçe Aköz (2013–2020).
16. Robin Burns (2014–2021).
17. Mayela Soto Jimenez (2015–2021).

### Current doctoral students

1. Rahul Pisupati (2017–).
2. Krzysztof Stankiewicz (with Joachim Hermisson, 2017–).
3. Francesca Beclin (2021–).
4. Grégoire Bohl-Viallefond (2021–).
5. Elizaveta Grigoreva (2022–).

### 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 Svardal (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.
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.
24. Daniele Filalet (2010–2022). Bayer Crop Science, St. Louis, USA.

### Current postdocs

1. Benjamin Jaegle (2015–).
2. Pieter Clauw (2015–).
3. Alexandra Kornienko (2017–).
4. Tom Ellis (2018–).
5. Haijun Liu (2019–).
6. Yoav Voichek (2020–).
7. Anna Igolkina (2021–).
8. Laura Diezma (with Arturo Marí-Ordóñez, 2021–).

## 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).
- ERC 2020 Qualitative Evaluation of Completed Projects (2021).
- 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 (2013–2020).
- 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).
- *Ad hoc* advisory boards organized by the offices of the Chancellor and President of Austria in response to the Covid-19 pandemic (2020–2021).
- TEB VIB-UGent, 2021.
- SAB, Center of Excellence in Tree Biology, Academy of Finland (2022–).
- SAB, Department of Computational Biology, University of Lausanne.

## Publications

### Public papers

- [1] Pieter Clauw, Envel Kerdaffrec, Joanna Gunis, Ilka Reichardt, Viktoria Nizhynska, Stefanie Koemeda, Jakub Jez, and Magnus Nordborg. Locally adaptive temperature response of vegetative growth in *Arabidopsis thaliana*. *bioRxiv*, page 2022.02.15.480488, February 2022.

- [2] Eriko Sasaki, Joanna Gunis, Ilka Reichardt-Gomez, Viktoria Nizhynska, and Magnus Nordborg. Conditional GWAS of non-CG transposon methylation in *Arabidopsis thaliana* reveals major polymorphisms in five genes. *bioRxiv*, page 2022.02.09.479810, February 2022.
- [3] Tal Dahan-Meir, Thomas James Ellis, Fabrizio Mafesoni, Hanan Sela, Jacob Manisterski, Naomi Avivi-Ragolsky, Amir Raz, Moshe Feldman, Yehoshua Anikster, Magnus Nordborg, and Avraham A Levy. The genetic structure of a wild wheat population has remained associated with microhabitats over 36 years. *bioRxiv*, page 2022.01.10.475641, January 2022.
- [4] Benjamin Jaegle, Luz Mayela Soto-Jimenez, Robin Burns, Fernando A Rabanal, and Magnus Nordborg. Extensive gene duplication in *Arabidopsis* revealed by pseudo-heterozygosity. *bioRxiv*, 468652, 15 Nov 2021.
- [5] J Weiszmann, P Clauw, J Jagoda, I Reichardt-Gomez, S Koemeda, J Jez, M Nordborg, D Walther, T Nägele, and W Weckwerth. Plasticity of the primary metabolome in 241 cold grown *Arabidopsis thaliana* accessions and its relation to natural habitat temperature. *bioRxiv*, 311092, 25 Sep 2020.
- [6] 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 Aug 2017.
- [7] 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.
- [8] 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.
- [9] Gökçe Aköz and Magnus Nordborg. The *Aquilegia* genome reveals a hybrid origin of core eudicots. *Genome Biol.*, 20:256, 2019.
- [10] 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.
- [11] 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.
- [12] Matthias Nagler, Thomas Nägele, Christian Gilli, Lena Fagner, Arthur Korte, Alexander Platzer, Ashley Farrow, Magnus Nordborg, and Wolfram Weckwerth. Eco-metabolomics and metabolic modelling: making the leap from model systems in the lab to native populations in the field. *Front. Plant Sci.*, 2018.

## Journal articles

- [1] William Andres Lopez-Arboleda, Stephan Reinert, Magnus Nordborg, and Arthur Korte. Global genetic heterogeneity in adaptive traits. *Mol. Biol. Evol.*, 38:4822–4831, 2021.
- [2] Eriko Sasaki, Thomas Köcher, Danièle L Filiault, and Magnus Nordborg. Revisiting a GWAS peak in *Arabidopsis thaliana* reveals possible confounding by genetic heterogeneity. *Heredity*, 127:245–252, 2021.
- [3] Robin Burns, Terezie Mandáková, Joanna Gunis, Luz Mayela Soto-Jiménez, Chang Liu, Martin A Lysak, Polina Yu Novikova, and Magnus Nordborg. Gradual evolution of allopolyploidy in *Arabidopsis suecica*. *Nat Ecol Evol*, 5:1367–1381, 2021.
- [4] 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.
- [5] Takashi Tsuchimatsu, Hiroyuki Kakui, Misako Yamazaki, Cindy Marona, Hiroki Tsutsui, Afif Hedhly, Danièle L Filiault, Envel Kerdaffrec, Kristina Uzunova, Fernando A Rabanal, and Magnus Nordborg. GWAS with heterogeneous data: Estimating the fraction of phenotypic variation mediated by gene expression data. *G3*, 2018.
- [6] 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.
- [7] Rahul Pisupati, Ilka Reichardt, Ümit Seren, Pamela Korte, Viktoria Nizhynska, Envel Kerdaffrec, Kristina Uzunova, Fernando A Rabanal, Daniele L Filiault, and Magnus Nordborg. Adaptive radiation and reveals an extraordinarily polymorphic chromosome with a unique history. *Elife*, 7, 2018.

- Magnus Nordborg. Verification of arabidopsis stock collections using SNPmatch, a tool for genotyping highplexed samples. *Sci Data*, 4:170184, 2017.
- [15] Matteo Togninalli, Ümit Seren, Dazhe Meng, Joffrey Fitz, Magnus Nordborg, Detlef Weigel, Karsten Borgwardt, Arthur Korte, and Dominik Grimm. The AraG-WAS Catalog: A curated and standardized *Arabidopsis thaliana* GWAS catalog. *Nucleic Acids Res.*, 2017.
- [16] Hannes Svardal, 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.
- [17] Takashi Tsuchimatsu, Pauline M Goubet, Sophie Gallina, Anne-Catherine Holl, Isabelle Fobis-Loisy, Hélène Bergès, 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.
- [18] Fernando A Rabanal, Terezie Mandáková, Luz M Soto-Jiménez, 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.
- [19] Fernando A Rabanal, Viktoria Nizhynska, Terezie Mandáková, Polina Yu Novikova, Martin A Lysak, Richard Mott, and Magnus Nordborg. Unstable inheritance of 45S rRNA genes in *Arabidopsis thaliana*. *G3*, 2017.
- [20] Martha Imprialou, André 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, Milto Tsiantis, Magnus Nordborg, Gunnar Rättsch, Richard M Clark, and Richard Mott. Genomic rearrangements in *Arabidopsis* considered as quantitative traits. *Genetics*, 2017.
- [21] Cheng-Ruei Lee, Hannes Svardal, 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.
- [22] Polina Yu Novikova, Takashi Tsuchimatsu, Samson Simon, Viktoria Nizhynska, Viktor Voronin, Robin Burns, Olga M Fedorenko, Svante Holm, Torbjörn Säll, Elisa Prat, William Marande, Vincent Castric, and Magnus Nordborg. Genome sequencing reveals the origin of the allotetraploid *Arabidopsis suecica*. *Mol. Biol. Evol.*, 2017.
- [23] Envel Kerdaffrec, Danièle L Filiault, Arthur Korte, Eriko Sasaki, Viktoria Nizhynska, Ümit Seren, and Magnus Nordborg. Multiple alleles at a single locus control seed dormancy in Swedish *Arabidopsis*. *Elife*, 5:e22502, 2016.
- [24] Ümit 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.
- [25] 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.
- [26] 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.
- [27] 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.
- [28] Polina Yu Novikova, Nora Hohmann, Viktoria Nizhynska, Takashi Tsuchimatsu, Jamshaid Ali, Graham Muir, Alessia Guggisberg, Tim Paape, Karl Schmid, Olga M Fedorenko, Svante Holm, Torbjörn Säll, Christian Schlötterer, Karol Marhold, Alex Widmer, Jun Sese, Kentaro K Shimizu, Detlef Weigel, Ute Krämer, 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.
- [29] 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.
- [30] The 1001 Genomes Consortium. 1,135 genomes reveal the global pattern of polymorphism in *Arabidopsis thaliana*. *Cell*, 166:481–491, 2016.
- [31] 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.

- [32] 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.
- [33] 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.
- [34] Wesley C Warren, Anna J Jasinska, Raquel Garcia-perez, Hannes Svardal, Chad Tomlinson, Mariano Rocchi, Nicoletta Archidiacono, Oronzio 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, Nikoleta 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.
- [35] 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.
- [36] 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.
- [37] 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.
- [38] 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.
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