

PUBLICATION LIST – DR. PHIL. FELIX GUGERLI

Original publications (ISI/reviewed; * = senior author)

Bibliographic records as of November, 2024 (ISI Core Collection)

Number of articles listed in Web of Science: 133

Number of citations: 6323 (average 47.54)

h-index: 43

Budde KB, Rellstab C, Heuertz M, Gugerli F, Verdú M, Pausas JG, González-Martínez SC 2024. Divergent selection on Mediterranean pine stands on local spatial scales. **Journal of Ecology** 112: 278–290.

Ferretti M, Fischer C, Gessler A, Graham C, Meusburger K, Abegg M, Bebi P, Bergamini A, Brockerhoff EG, Brunner I, Bühler C, Conedera M, Cothureau P, D'Oddorico P, Düggelin C, Ginzler C, Grendelmeier A, Gugerli F, Haeni M, Hagedorn F, Hägeli M, Hegetschweiler KT, Holderegger R, Krumm F, Queloz V, Rigling A, Risch AC, Rohner B, Rosset C, Scherrer D, Schulz T, Thürig E, Traub B, von Arx G, Waldner P, Wohlgemuth T, Zimmermann NE, Shackleton R 2024. Advancing forest inventorying and monitoring. **Annals of Forest Science** 81: 6. DOI 10.1186/s13595-023-01220-9.

Guillaume AS, Rogivue A, Leempoel K, Gugerli F, Parisod C, Joost S 2024. Integrating very high resolution environmental proxies in genome-environment association studies. **Evolutionary Applications** 17: e13737. DOI 10.1111/eva.13737.

Milesi P, Kastally C, Dauphin B, Cervantes S, Bagnoli F, Budde KB, Cavers S, Fady B, Faivre-Rampant P, González-Martínez SC, Grivet D, Gugerli F, Jorge V, Lesur Kupin I, Ojeda DI, Olsson S, Opgenoorth L, Pinosio S, Plomion C, Rellstab C, Rogier O, Scalabrin S, Scotti I, Vendramin GG, Westergren M, GenTree Consortium, Lascoux M, Pyhäjärvi T 2024. Resilience of genetic diversity in forest trees over the Quaternary. **Nature Communication** 15: 8538. DOI 10.1038/s41467-024-52612-y (presubmission at **bioRxiv** DOI 10.1101/2023.01.05.522822v2)

Pearman PB, Broennimann O, Aavik T, Albaryrak T, Alves PC, Aravanopoulos FA, Bertola LD, Biedrzycka A, Buzan E, Cubric-Curik V, Djan M, Fedorca A, Fuentes-Pardo AP, Fussi B, Godoy JA, Gugerli F, Hoban S, Holderegger R, Hvilsom C, Iacolina L, Kalamujic Stroil B, Klinga P, Konopiński MK, Kopatz A, Laikre L, Lopez Fernandez M, McMahon BJ, Mergeay J, Neophytou C, Pálsson S, Paz-Vinas I, Posledovich D, Primmer CR, Raeymaekers JAM, Rinkevich B, Rolečková B, Runçis D, Segelbacher G, Schürz L, Kavčič Sonnenschein K, Stefanovic M, Thurfjell H, Träger S, Tsvetkov IN, Velickovic N, Vergeer P, Vernesi C, Vilà C, Westergren M, Zachos FE, Guisan A, Bruford M 2024. Conserving genetic diversity during climate change: Niche marginality and discrepant monitoring effort in Europe. **Nature Ecology & Evolution** 8: 267–281.

* Sonnenwyl V, Dauphin B, Fragnière Y, Clément B, Grünig S, Brodbeck S, Parisod C, Kozlowski G, Gugerli F 2024. Genetic underpinning of failed afforestation with allochthonous *Pinus cembra* in the northwestern Swiss Alps. **Alpine Botany** 134: 1–13. DOI 10.1007/s00035-023-00304-6

* Terzer E, Schmid M, Bauert B, Csencsics D, Birrer S, Brodbeck S, Bolliger J, Gugerli F 2024. Distinct spatial patterns of genetic structure and diversity in the butterfly Marbled White (*Melanargia galathea*) inhabiting fragmented grasslands. **Conservation Genetics**. 25: 631–645. DOI 0.1007/s10592-023-01593-4

* Dauphin B, Rellstab C, Wüest RO, Karger DN, Holderegger R, Gugerli F, Manel S 2023. Re-thinking the environment in landscape genomics. **Trends in Ecology & Evolution**. 38: 261–274 (joint senior authorship Gugerli/Manel)

Gugerli F, Brodbeck S, Lendvay B, Dauphin B, Bagnoli F, Tinner W, van der Knaap WO, Höhn M, Vendramin GG, Morales-Molino C, Schwörer C 2023. A range-wide postglacial history of Swiss stone pine based on molecular markers and palaeoecological evidence. **Journal of Biogeography** 50: 1049–1062.

Reutimann O, Dauphin B, Baltensweiler A, Gugerli F, Kremer A, Rellstab C 2023. Abiotic factors predict taxonomic composition and genetic admixture in populations of hybridizing white oak species (*Quercus* sect. *Quercus*) on regional scale. **Tree Genetics & Genomes** 19: 22. DOI 10.1007/s11295-023-01598-7

* Kersten B, Rellstab C, Schroeder H, Brodbeck S, Fladung M, Krutovsky KV, Gugerli F 2022. The mitochondrial genome sequence of *Abies alba* Mill. reveals a high structural and combinatorial variation. **BMC Genomics** 23: 776. DOI 10.1186/s12864-022-08993-9.

* Neophytou C, Heer K, Milesi P, Peter M, Pyhäjärvi T, Westergren M, Rellstab C, Gugerli F 2022. Genomics and adaptation in forest ecosystems. **Tree Genetics & Genomes**. 18: 12. DOI 10.1007/s11295-022-01542-1 (joint senior authorship Gugerli/Rellstab)

Schwörer C, Leunda M, Alvarez N, Gugerli F, Sperisen C 2022. The untapped potential of macrofossils in plant aDNA research. **New Phytologist** 235: 391–401.

* Wötzl S, Andrello M, Albani MC, Koch MA, Coupland G, Gugerli F (2022). *Arabis alpina*: a perennial model plant for ecological genomics and life-history evolution. **Molecular Ecology Resources** 22: 468–486.

Benavides R, Carvalho B, Bastias CC, López-Quiroga D, Mas A, Cavers S, Gray A, Albet A, Alía R, Ambrosio O, Aravanopoulos F, Auñón F, Avanzi C, Avramidou E, Bagnoli F, Ballesteros E, Barbas E, Bastien C, Bernier F, Bignalet H, Bouic D, Brunetto W, Buchovska J, Cabanillas-Saldaña AM, Cheval N, Climent JM, Corréard M, Cremer E, Danusevicius D, Dauphin B, Del Caño F, Denou J-L, Dokhelar B, Dourthe R, Farsakoglou A-M, Feras A, Fonti P, Ganopoulos I, García del Barrio JM, Gilg O, González-Martínez SC, Graf R, Grivet D, Gugerli F, Hartleitner C, Heer K, Hollenbach E, Hurel A, Issenhuth B, Jean F, Jorge V, Jouineau A, Kappner J-P, Kärkkäinen K, Kesälahti R, Knutzen F, Kujala ST, Kumpula T, Labriola M, Lalanne C, Lambertz J, Lascoux M, Le Provost G, Liesebach M, Malliarou E, Marchon J, Mariotte N, Martínez-Sancho E, Matesanz S, Meischner H, Michotey C, Milesi P, Morganti S, Myking T, Nilsen AE, Notivol E, Opgenoorth L, Østreng G, Pakull B, Piotti A, Plomion C, Poinot N, Pringarbe M, Puzos L, Pyhäjärvi T, Raffin A, Ramírez-Valiente JA, Rellstab C, Richter S, Robledo-Arnuncio JJ, San Segundo S, Savolainen O, Schneck V, Schueler S, Scotti I, Semerikov V, Sønstebo JH, Spanu I, Thévenet J, Tollefsrud MM, Turion N, Vendramin GG, Villar M, Westin J, Fady B, Valladares F 2021. The GenTree Leaf Collection: Inter- and intraspecific leaf variation in seven forest tree species in Europe. **Global Ecology and Biogeography** 30: 590–597.

* Dauphin B, Rellstab C, Schmid M, Zoller S, Karger DN, Brodbeck S, Guillaume F, Gugerli F 2021. Genomic vulnerability to rapid climate warming in a tree species with a long generation time. **Global Change Biology** 27: 1181–1195.

Guillaume AS, Leempoel K, Rogivue A, Rochat E, Kasser M, Gugerli F, Parisod C, Joost S 2021. Multiscale very-high resolution topographic models in Alpine ecology: pros and cons of airborne LiDAR and drone-based stereo-photogrammetry technologies. **Remote Sensing** 13: 1588. DOI 10.3390/rs13081588

Opgenoorth L, Dauphin B, Benavides R, Heer K, Alizoti P, Martínez-Sancho E, Alía R, Ambrosio O, Audrey A, Auñón F, Avanzi C, Avramidou E, Bagnoli F, Barbas E, Bastias CC, Bastien C, Ballesteros E, Beffa G, Bernier F, Bignalet H, Bodineau G, Bouic D, Brodbeck S, Brunetto W, Buchovska J, Buy M, Cabanillas-Saldaña AM, Carvalho B, Cheval N, Climent JM, Corréard M, Cremer E, Danusevicius D, Del Caño F, Denou J-L, di Gerardi N, Dokhelar B, Ducouso A, Eskild Nilssen A, Farsakoglou A-M, Fonti P, Ganopoulos I, García del Barrio JM, Gilg O, González-Martínez SC, Graf R, Gray A, Grivet D, Gugerli F, Hartleitner C, Hollenbach E, Hurel A, Issehut B,

Jean F, Jorge V, Jouineau A, Kappner J-P, Kärkkäinen K, Kesälahti R, Knutzen F, Kujala ST, Kumpula TA, Labriola M, Lalanne C, Lambertz J, Lascoux M, Lejeune V, Le-Provost G, Levillain J, Liesebach M, López-Quiroga D, Meier B, Malliarou E, Marchon J, Mariotte N, Mas A, Matesanz S, Meischner H, Michotey C, Milesi P, Morganti S, Nievergelt D, Notivol E, Ostreng G, Pakull B, Perry A, Piotti A, Plomion C, Poinot N, Pringarbe M, Puzos L, Pyhäjärvi T, Raffin A, Ramírez-Valiente JA, Rellstab C, Remi D, Richter S, Robledo-Arnuncio JJ, San Segundo S, Savolainen O, Schueler S, Schneck V, Scotti I, Semerikov V, Slámová L, Sønstebo JH, Spanu I, Thevenet J, Tollefsrud MM, Turion N, Vendramin GG, Villar M, von Arx G, Westin J, Fady B, Myking T, Valladares F, Aravanopoulos FA, Cavers S 2021. The GenTree Platform: growth traits and tree-level environmental data in 12 European forest tree species. **Gigascience** 10: giab010. DOI 10.1093/gigascience/giab010.

Pärli R, Lieberherr E, Holderegger R, Gugerli F, Widmer A, Fischer MC 2021. Developing a monitoring program of genetic diversity: What do the stakeholders say? **Conservation Genetics** 22: 633–684.

* Csilléry K, Sperisen C, Ovaskainen O, Buchmann N, Widmer A, Gugerli F. 2020. Adaptation to local climate in a multi-trait space: evidence from silver fir (*Abies alba* Mill.) populations across a heterogeneous environment. **Heredity** 124: 77–92. (presubmission at **bioRxiv** DOI 10.1101/292540)

Dauphin B, Wüest RO, Brodbeck S, Zoller S, Fischer MC, Holderegger R, Gugerli F, Rellstab C 2020. Disentangling the effects of geographic peripherality and habitat suitability on neutral and adaptive genetic variation in Swiss stone pine. **Molecular Ecology** 29: 1972–1989.

Martínez-Sancho E, Slámová L, Morganti S, Grefen C, Carvalho B, Dauphin B, Rellstab C, Gugerli F, Opgenoorth L, Heer K, Knutzen F, von Arx G, Valladares F, Cavers S, Fady B, Alía R, Aravanopoulos F, Avanzi C, Bagnoli F, Barbas E, Bastien C, Benavides R, Bernier F, Bodineau G, Bastias CC, Charpentier J-P, Climent JM, Corréard M, Courdier F, Danusevicius D, Farsakoglou A-M, García del Barrio JM, Gilg O, González-Martínez SC, Gray A, Hartleitner C, Hurel A, Jouineau A, Kärkkäinen K, Kujala ST, Labriola M, Lascoux M, Lefebvre M, Lejeune V, Le Provost G, Liesebach M, Malliarou E, Matesanz S, Michotey C, Milesi P, Myking T, Notivol E, Pakull B, Piotti A, Plomion C, Pringarbe M, Pyhäjärvi T, Raffin A, Ramírez-Valiente JA, Ramskogler K, Robledo-Arnuncio JJ, Savolainen O, Schueler S, Semerikov V, Spanu I, Thévenet J, Tollefsrud MM, Turion N, Veisse D, Vendramin GG, Villar M, Westin J, Fonti P 2020. The GenTree dendroecological collection: tree-ring and wood density data from seven tree species across Europe. **Scientific Data** 7: 1, DOI 10.1038/s41597-019-0340-y.

Rellstab C, Zoller S, Sailer C, Tedder A, Gugerli F, Shimizu KK, Holderegger R, Widmer A, Fischer MC 2020. Genomic signatures of convergent adaptation to Alpine environments in three Brassicaceae species. **Molecular Ecology** 29: 4350–4365.

Reutimann O, Gugerli F, Rellstab C 2020. A species-discriminatory single-nucleotide polymorphism set reveals maintenance of species integrity in hybridizing European white oaks (*Quercus* spp.) despite high levels of admixture. **Annals of Botany** 125: 663–676.

* Schenker L, Bollmann K, Rehnus M, Gugerli F 2020. Hare's affairs: Lessons learnt from a genetic monitoring for tracking individuals based on noninvasive sampling in mountain hare **Ecology and Evolution** 10: 10150–10166.

Trivellone V, Meier M, Corrado C, Paltrinieri P, Gugerli F, Moretti M, Wolf S, Collatz J 2020. Multiscale determinants drive parasitization of Drosophilidae by Hymenopteran parasitoids in agricultural landscapes. **Insects** 11: 334, DOI 10.3390/insects1106033.

Choudhury RA, Rogivue A, Gugerli F, Parisod C 2019. Impact of polymorphic transposable element distributions on recombination across the genome. **Molecular Ecology** 28: 1550–1562.

Gugerli F, Moretti M, Graf R, Maier M, Corrado C, Collatz J, Trivellone V 2019. Genetische Vielfalt von *Trichopria drosophilae*, einem natürlichen Feind der Kirschessigfliege. **Agrarforschung Schweiz** 10: 396–401. (also in French)

Holderegger R, Balkenhol N, Bolliger J, Engler JO, Gugerli F, Hochkirch A, Nowak C, Segelbacher G, Widmer A, Zachos FE 2019. Linking conservation genetics science with practice. **Molecular Ecology** 28: 3848–3856.

Mosca E, Cruz F, Gómez Garrido J, Bianco L, Rellstab C, Brodbeck S, Csilléry K, Fady B, Fladung M, Fussi B, Gömöry D, González-Martínez SC, Grivet D, Gut M, Hansen OK, Heer K, Kaya Z, Krutovsky KV, Kersten B, Liepelt S, Opgenoorth L, Sperisen C, Ullrich KK, Vendramin GG, Ziegenhagen B, Westergren M, Ziegenhagen B, Alioto T, Gugerli F, Heinze B, Höhn M, Troggio M, Neale DB 2019. The *Abies alba* genome project: a new genomic resource for a sensitive species. **G3—Genes, Genomes, Genetics** 9: 7, 2039–2049.

* Rellstab C, Dauphin B, Zoller S, Brodbeck S, Gugerli F 2019. Using transcriptome sequencing and pooled exome capture to study local adaptation in the giga-genome of *Pinus cembra*. **Molecular Ecology Resources** 19: 536–551.

* Rogivue A, Choudhury RR, Zoller S, Joost S, Felber F, Kasser M, Parisod C, Gugerli F 2019. Genome-wide variation in nucleotides and retrotransposons in alpine populations of *Arabis alpina* (Brassicaceae). **Molecular Ecology Resources** 19: 773–787. (joint first authorship Rogivue/Choudhury; joint senior authorship Gugerli/Parisod)

* Lendvay B, Hartmann M, Brodbeck S, Nievergelt D, Reinig F, Zoller S, Parducci L, Gugerli F, Büntgen U, Sperisen C 2018. Improved recovery of ancient DNA from subfossil wood – application to the world's oldest Late Glacial pine forest. **New Phytologist** 217: 1737–1748. (joint senior authorship Gugerli/Büntgen/Sperisen)

* Luqman H, Muller R, Vaupel A, Brodbeck S, Bolliger J, Gugerli F 2018. No distinct barrier effects of highways and a wide river on the genetic structure of the Alpine newt (*Ichthyosaura alpestris*) in densely settled landscapes. **Conservation Genetics** 19: 673–685.

Neuschulz EL, Merges D, Bollmann K, Gugerli F, Böhning-Gaese K 2018. Biotic interactions and seed deposition rather than abiotic factors determine plant recruitment at elevational range limits. **Journal of Ecology** 106: 948–957.

* Rogivue A, Graf R, Parisod C, Holderegger R, Gugerli F 2018. The phylogeographic structure of *Arabis alpina* in the Alps shows consistent patterns across different types of molecular markers and of geographic scales. **Alpine Botany** 128: 35–45.

Sailer C, Babst-Kostecka A, Fischer MC, Zoller S, Widmer A, Vollenweider P, Gugerli F, Rellstab C 2018. Transmembrane transport and stress response genes play an important role in adaptation of *Arabidopsis halleri* to metalliferous soils. **Scientific Reports** 8: 16085.

Schoville SD, Dalongeville A, Viennois G, Gugerli F, Taberlet P, Lequette B, Alvarez N, Manel S 2018. Preserving genetic connectivity in the European Alps protected area network. **Biological Conservation** 218: 99–109.

Fischer MC, Rellstab C, Leuzinger M, Roumet M, Gugerli F, Shimizu KK, Holderegger R, Widmer A 2017. Do microsatellite markers reflect genome-wide genetic diversity and population differentiation? A case study in *Arabidopsis halleri*. **BMC Genomics** 18: 69.

Milanesi P, Holderegger R, Bollmann K, Gugerli F, Zellweger F 2017. Three-dimensional habitat structure and landscape genetics: a step forward in estimating functional connectivity. **Ecology** 98: 393–402.

* Rellstab C, Fischer MC, Zoller S, Graf R, Tedder A, Shimizu KK, Widmer A, Holderegger R, Gugerli F 2017. Local adaptation (mostly) remains local: reassessing environmental associations of climate-related candidate SNPs in *Arabidopsis halleri*. **Heredity** 118: 193–201.

- Burkart S, Gugerli F, Senn J, Kuehn R, Bolliger J 2016. Evaluating the functionality of expert-assessed wildlife corridors with genetic data from roe deer. **Basic and Applied Ecology** 17: 52–60.
- Frei M, Csencsics D, Brodbeck S, Schweizer E, Bühler C, Gugerli F, Bolliger J 2016. Combining landscape genetics, radio-tracking and long-term monitoring to derive management implications for Natterjack toads in agricultural landscapes (*Epidalea calamita*). **Journal for Nature Conservation** 32: 22–34.
- Mosca E, Gugerli F, Eckert AJ, Neale DB 2016. Signatures of natural selection on *Pinus cembra* and *P. mugo* along altitudinal gradients in the Alps. **Tree Genetics & Genomes** 12: 9 (doi 10.1007/s11295-015-0964-9).
- * Rellstab C, Bühler A, Graf R, Folly C, Gugerli F 2016. Using joint multivariate analyses of leaf morphology and neutral molecular markers for taxon identification in three hybridizing European white oak species (*Quercus* spp.). **Annals of Forest Science** 73: 669–679.
- * Rellstab C, Zoller S, Walthert L, Lesur I, Bodénès C, Pluess AR, Sperisen C, Kremer A, Gugerli F 2016. Relationship between ecological gradients and adaptive genetic variation in candidate genes of oaks (*Quercus* spp.). **Molecular Ecology** 25: 5907–5924.
- * Schmid M, Csencsics D, Gugerli F 2016. Repetitive flanking sequences challenge microsatellite marker development: a case study in the lepidopteran *Melanargia galathea*. **Molecular Ecology Resources** 16:1499–1507.
- Neuschulz EL, Mueller T, Bollmann K, Gugerli F, Böhning-Gaese K 2015. Seed perishability determines the caching behaviour of a food-hoarding bird. **Journal of Animal Ecology** 84: 71–78.
- Rellstab C, Gugerli F, Eckert AJ, Hancock AM, Holderegger R 2015. A practical guide to environmental association analysis in landscape genomics. **Molecular Ecology** 24: 4348–4370. [invited review].
- Marked as "highly cited paper in ISI Web of Knowledge"**
- Stockenhuber R, Zoller S, Shimizu-Inatsugi R, Gugerli F, Shimizu KK, Widmer A, Fischer MC 2015. Efficient detection of novel nuclear markers for Brassicaceae by transcriptome sequencing. **PLoS ONE** 10: e0128181.
- * Buehler D, Brodbeck S, Holderegger R, Schnyder E, Gugerli F 2014. Validation of outlier loci through replication in independent data sets: a test on *Arabis alpina*. **Ecology & Evolution** 4:4296–4306.
- Gerber S, Chadœuf J, Gugerli F, Lascoux M, Buiteveld J, Cottrell JE, Dounavi A, Fineschi S, Forrest L, Fogelqvist J, Goicoechea PG, Jensen JS, Salvini D, Vendramin GG, Kremer A 2014. High rates of gene flow by pollen and seed in oak populations across Europe. **PLoS ONE** 9: e85130.
- * Lendvay B, Höhn M, Brodbeck S, Mindrescu M, Gugerli F 2014. Genetic structure in *Pinus cembra* from the Carpathian Mountains inferred from nuclear and chloroplast microsatellites suggests postglacial range contraction and identifies introduced individuals. **Tree Genetics & Genomes** 10: 1419–1433.
- * Buehler D, Poncet BN, Holderegger R, Manel S, Taberlet P, Gugerli F 2013. An outlier locus relevant in habitat-mediated selection in an alpine plant across independent regional replicates. **Evolutionary Ecology** 27: 285–300.
- Fischer MC, Rellstab C, Tedder A, Zoller S, Gugerli F, Holderegger R, Shimizu KK, Widmer A 2013. Population genomic footprints of selection and associations with climate in natural populations of *Arabidopsis halleri* from the Alps. **Molecular Ecology** 22: 5594–5607
- Gugerli F, Alvarez N, Tinner W 2013. A deep dig – hindsight on Holocene vegetation composition from ancient environmental DNA. **Molecular Ecology** 22: 3433–3436. [invited perspective]

- Gugerli F, Brandl R, Castagneyrol B, Franc A, Jactel H, Koelewijn H-P, Martin F, Peter M, Pritsch K, Schröder H, Smulders MJM, Kremer A, Ziegenhagen B, Evoltree JERA3 contributors 2013. Community genetics in the time of next generation molecular technologies. **Molecular Ecology** 22: 3198–3207. [opinion article]
- King GM, Gugerli F, Fonti P, Frank DC 2013. Tree growth response along an elevational gradient: climate or genetics? **Oecologia** 173: 1587–1600.
- Rellstab C, Zoller S, Tedder A, Gugerli F, Fischer MC 2013. Validation of SNP allele frequencies determined by pooled next-generation sequencing in natural populations of a non-model plant species. **PLoS ONE** 8: e80422.
- Steinbrecher R, Contran N, Gugerli F, Schnitzler J-P, Zimmer I, Menard T, Günthardt-Goerg MS 2013. Inter- and intra-specific variability in isoprene production and photosynthesis of Central European oak species. **Plant Biology** 15 (Suppl. 1): 148–156.
- Winkler M, Tribsch A, Schneeweiss GM, Brodbeck S, Gugerli F, Holderegger R, Schönswetter P 2013. Strong nuclear differentiation contrasts with widespread sharing of plastid DNA haplotypes in southern European purple saxifrages (*Saxifraga* sect. *Porphyrium* subsect. *Oppositifoliae*). **Botanical Journal of the Linnean Society** 173: 622–636.
- * Zulliger D, Schnyder E, Gugerli F 2013. Are adaptive loci transferable across genomes of related species? – Outlier and association analyses in Alpine Brassicaceae species. **Molecular Ecology** 22: 1626–1639.
- Barthe S, Gugerli F, Barkley N, Maggia L, Cardi C, Lemes MR, Gribel R, Scotti I 2012. Always look on both sides: phylogenetic information conveyed by SSR allele sequences. **PLoS One** 7: e40699.
- * Buehler D, Graf R, Holderegger R, Gugerli F 2012. Contemporary gene flow and mating system of *Arabis alpina* in a Central European alpine landscape. **Annals of Botany** 109: 1359–1367.
- * Hepenstrick D, Thiel D, Holderegger R, Gugerli F 2012. Genetic discontinuities in roe deer (*Capreolus capreolus*) coincide with fenced transportation infrastructure. **Basic and Applied Ecology** 13: 631–638.
- Holderegger R, Gugerli F 2012. Where do you come from, where do you go? Directional migration rates in landscape genetics. **Molecular Ecology** 21: 5640–5642. [invited perspective]
- Kormann U, Gugerli F, Ray N, Excoffier L, Bollmann K 2012. Parsimony-based pedigree analysis and individual-based landscape genetics suggest topography to restrict dispersal and connectivity in the endangered capercaillie. **Biological Conservation** 152: 241–252.
- Landergott U, Gugerli F, Hoebee SE, Finkeldey R, Holderegger R 2012. Effects of seed mass on seedling height and competition in European white oaks. **Flora** 207: 721–725.
- Manel S, Gugerli F, Thuiller W, Alvarez N, Legendre P, Holderegger R, Gielly L, Taberlet P, Intra-BioDiv Consortium 2012. Broad-scale adaptive genetic variation in alpine plants is driven by temperature and precipitation. **Molecular Ecology** 21: 3729–3738.
- * Salzer K, Gugerli F 2012. Reduced fitness at early life stages in peripheral versus core populations of Swiss stone pine (*Pinus cembra*) is not reflected by levels of inbreeding in seed families. **Alpine Botany** 122: 75–85.
- * Taberlet P, Zimmermann N, Englisch T, Tribsch A, Holderegger R, Alvarez N, Niklfeld H, Mirek Z, Moilanen A, Ahlmer RW, Ajmone-Marsan P, Bona E, Bovio M, Choler P, Cieślak E, Coldea G, Colli L, Cristea V, Dalmas J-P, Frajman B, Garraud L, Gaudeul M, Gielly L, Gutermann W, Jogan N, Kagalo AA, Korbecka G, Küpfer P, Lequette B, Letz RD, Manel S, Mansion G, Marhold K, Martini F, Negrini R, Niño F, Paun O, Pellecchia M, Perico G, Piekos-Mirkowa H, Prosser F, Puscas M, Ronikier M, Scheuerer M, Schneeweiss GM, Schönswetter P, Schrott-Ehrendorfer L, Schüpfer F, Selvaggi A, Steinmann K, Thiel-Egenter C, van Loo M, Winkler M, Wohlgemuth T, Wraber T, Gugerli F, IntraBioDiv consortium 2012. Genetic diversity in widespread species is not congruent with species richness in alpine plant communities. **Ecology Letters** 15: 1439–1448.

- Winkler M, Tribsch A, Schneeweiss GM, Brodbeck S, Gugerli F, Holderegger R, Abbott RJ, Schöns-wetter P 2012. Tales of the unexpected: Phylogeography of the arctic-alpine model plant *Saxifraga oppositifolia* (Saxifragaceae) revisited. **Molecular Ecology** 21: 4618–4630.
- * Buehler D, Graf R, Holderegger R, Gugerli F 2011. Using the 454 pyrosequencing-based technique in the development of nuclear microsatellite loci in the alpine plant *Arabis alpina* (Brassicaceae). **American Journal of Botany** 98:e103–e105.
- Kamm U, Gugerli F, Rotach P, Edwards PJ, Holderegger R 2011. Genetic consequences of low local tree densities - implications for the management of naturally rare, insect pollinated species in temperate forests. **Forest Ecology and Management** 262:1047–1053.
- Kremer A, Vinceti B, Alía R, Burczyk J, Cavers S, Degen B, Finkeldey R, Fluch S, Gömöry D, Gugerli F, Koelewijn HP, Koskela J, Lefèvre F, Morgante M, Müller-Starck G, Plomion C, Taylor G, Turok J, Savolainen O, Ziegenhagen B 2011. Forest ecosystem genomics and adaptation: Evoltree conference report. **Tree Genetics & Genomes** 7: 869–875.
- * Thiel-Egenter C, Alvarez N, Holderegger R, Tribsch A, Englisch T, Wohlgemuth T, Colli L, Gau-deul M, Gielly L, Jogan N, Linder HP, Negrini R, Niklfeld H, Pellecchia M, Rioux D, Schöns-wetter P, Taberlet P, van Loo M, Winkler M, IntraBioDiv Consortium, Gugerli F 2011. Break zones in the distributions of alleles and species in alpine plants. **Journal of Biogeography** 37: 772–782.
- Wirth LR, Waser NM, Graf R, Gugerli F, Landergott U, Erhardt A, Linder HP, Holderegger R 2011. Effects of floral neighborhood and genetic diversity of seeds in high-alpine cushion plants. **Oecologia** 167: 427–434.
- * Herrmann D, Poncet BN, Manel S, Rioux D, Gielly L, Taberlet P, Gugerli F 2010. Selection criteria for scoring amplified fragment length polymorphisms (AFLPs) positively affect the reliability of population genetic parameter estimates. **Genome** 53: 302–310.
- Holderegger R, Buehler D, Gugerli F, Manel S 2010. Landscape genetics of plants. **Trends in Plant Science** 15: 675–683. [review]
- Jacob G, Debrunner R, Gugerli F, Schmid B, Bollmann K 2010. Field surveys of capercaillie (*Tetrao urogallus*) in the Swiss Alps underestimated local abundance of the species as revealed by genetic analyses of non-invasive samples. **Conservation Genetics** 11: 33–44.
- Kamm U, Gugerli F, Rotach P, Edwards PJ, Holderegger R 2010. Open areas in a landscape enhance pollen-mediated gene flow of a tree species: evidence from northern Switzerland. **Land-sape Ecology** 25: 903–911.
- Manel S, Poncet B, Legendre P, Gugerli F, Holderegger R 2010. Common factors drive genetic variation of adaptive relevance at different spatial scales in *Arabis alpina*. **Molecular Ecology** 19: 3824–3835.
- Poncet B, Herrmann D, Gugerli F, Taberlet P, Holderegger R, Gielly L, Rioux D, Thuiller W, Aubert S, Manel S 2010. Tracking genes of ecological relevance in response to environment using a genome scan: application to *Arabis alpina*. **Molecular Ecology** 19: 2896–2907.
- Wirth LR, Graf R, Gugerli F, Landergott U, Holderegger R 2010. Between-year variation in seed weights across altitudes in the high-alpine plant *Eritrichium nanum*. **Plant Ecology** 207: 227–231.
- Wirth LR, Graf R, Gugerli F, Landergott U, Holderegger R 2010. Lower selfing rate at higher altitudes in the alpine plant *Eritrichium nanum* (Boraginaceae). **American Journal of Botany** 97: 899–901.
- * Alvarez N, Thiel-Egenter C, Tribsch A, Manel S, Taberlet P, Küpfer P, Holderegger R, Brodbeck S, Gaudeul M, Gielly L, Mansion G, Negrini R, Paun O, Pellecchia M, Rioux D, Schöns-wetter P, Schüpf F, Van Loo M, Winkler M, Gugerli F, IntraBioDiv consortium 2009. Biogeographic history of alpine plants: substrate ecology drives genetic structures. **Ecology Letters** 12: 632–640.

- Balkenhol N, Gugerli F, Cushman SA, Waits LP, Coulon A, Holderegger R, Wagner HH, participants of the Landscape Genetics Research Agenda Workshop 2007. 2009 Identifying future research needs in landscape genetics: where to from here? **Landscape Ecology** 24: 455–463.
- Gugerli F, Rüegg M, Vendramin GG 2009. Gradual decline in genetic variability in Swiss stone pine populations (*Pinus cembra*) across Switzerland suggests postglacial re-colonization into the Alps from a common glacial refugium. **Botanica Helvetica** 119: 13–22.
- Höhn M, Gugerli F, Abran P, Bisztray G, Buonamici A, Cseke K, Hufnagel L, Sebastiani F, Quintela-Sabarís C, Vendramin GG 2009. Chloroplast DNA variation maintained in marginal populations of Swiss stone pine (*Pinus cembra* L.) from the Alps and the Carpathians suggests extensive historic gene flow by pollen and seed. **Journal of Biogeography** 36: 1798–1806.
- Kamm U, Rotach P, Gugerli F, Siroky M, Edwards PJ, Holderegger R 2009. Frequent long-distance gene flow in a rare temperate forest tree. **Heredity** 103: 476–482.
- Salzer K, Sebastiani F, Gugerli F, Buonamici A, Vendramin GG 2009. Isolation and characterization of eight polymorphic nuclear microsatellite loci in *Pinus cembra* L. **Molecular Ecology Resources** 9: 858–861.
- Thiel-Egenter C, Gugerli F, Alvarez N, Brodbeck S, Cieslak E, Colli L, Englisch T, Gaudeul M, Gielly L, Korbecka G, Negrini R, Patrini M, Paun O, Pellecchia M, Rioux D, Ronikier M, Schönswetter P, Schüpfer F, Taberlet P, Tribsch A, Van Loo M, Winkler M, Holderegger R, IntraBioDiv Consortium 2009. Effects of life history traits on high-mountain plant genetic diversity: a multi-species, large-scale study across the Alps and the Carpathians. **Global Ecology & Biogeography** 18: 78–87.
- * Thiel-Egenter C, Holderegger R, Brodbeck S, IntraBioDiv Consortium, Gugerli F 2009. Concordant genetic breaks, identified by combining clustering and tessellation methods, in two co-distributed alpine plant species. **Molecular Ecology** 18: 4495–4507.
- Gugerli F 2008. Old seeds from the cold. **Science** 322: 1789. [letter]
- Gugerli F, Brodbeck S, Holderegger R 2008a. Utility of multilocus genotypes for taxon assignment in stands of closely related European white oaks from Switzerland. **Annals of Botany** 102: 855–863.
- Gugerli F, Brodbeck S, Holderegger R 2008b. Insertions–deletions in a microsatellite flanking region may be resolved by variation in stuttering patterns. **Plant Molecular Biology Reporter** 26: 255–262.
- Gugerli F, Gall R, Meier F, Wermelinger B 2008. Pronounced fluctuations of spruce bark beetle (Scolytinae: *Ips typographus*) populations did not result in bottleneck-induced genetic differentiation. **Forest Ecology and Management** 256: 405–409.
- Gugerli F, Tribsch A, Niklfeld H, Mirek Z, Ronikier M, Englisch T, Zimmermann N, Taberlet P, IntraBioDiv Consortium 2008. Relationships among levels of biodiversity and the relevance of intra-specific diversity in conservation – a project synopsis. **Perspectives in Plant Ecology, Evolution and Systematics** 10: 259–281.
- Holderegger R, Hermann D, Poncet B, Gugerli F, Taberlet P, Gielly L, Rioux D, Thuiller W, Brodbeck S, Aubert S, Manel S 2008. Land ahead: Using genome scans to identify molecular markers of adaptive relevance. **Plant Ecology and Diversity** 1: 273–283. [review]
- Scotti I, Gugerli F, Pastorelli R, Sebastiani F, Vendramin GG 2008. Maternally and paternally inherited molecular markers elucidate population patterns and inferred dispersal processes on a small scale within a subalpine stand of Norway spruce [*Picea abies* (L.) Karst.]. **Forest Ecology and Management** 255: 3806–3812.
- Tollefsrud MM, Kissling R, Gugerli F, Johnsen Ø, Skroppa T, Cheddadi R, van der Knaap P, Latałowa M, Terhürne-Berson R, Litt T, Geburek T, Brochmann C, Sperisen C 2008. Genetic consequences of glacial survival and postglacial colonization in Norway spruce: combined analysis of mitochondrial DNA and fossil pollen. **Molecular Ecology** 17: 3134–3150.

- Gugerli F, Walser J-C, Dounavi K, Holderegger R, Finkeldey R 2007. Spatial analyses of leaf morphological and nuclear microsatellite variation suggest a low influence of hybridization on the small-scale genetic structure in *Quercus petraea* and *Q. robur*. **Annals of Botany** 99: 713–722.
- Hoebee SE, Arnold U, Düggelin C, Gugerli F, Brodbeck S, Rotach P, Holderegger R 2007. Mating patterns and contemporary gene flow by pollen in a large continuous and a small isolated population of the scattered forest tree *Sorbus torminalis*. **Heredity** 99: 47–55.
- Werth S, Gugerli F, Holderegger R, Wagner HH, Scheidegger C 2007. Landscape genetics of the lichen epiphyte *Lobaria pulmonaria*. **Molecular Ecology** 16: 2807–2815.
- Fournier N, Rigling A, Dobbertin M, Gugerli F 2006. Faible différenciation génétique, à partir d'amplification aléatoire d'ADN polymorphe (RAPD), entre les types de pin sylvestre (*Pinus sylvestris* L.) d'altitude et de plaine dans les Alpes à climat continental. **Annals of Forest Science** 63: 431–439.
- * Holderegger R, Kamm U, Gugerli F 2006. Adaptive vs. neutral genetic diversity: implications for landscape genetics. **Landscape Ecology** 21: 797–807. [review]
- Werth S, Wagner HH, Gugerli F, Holderegger R, Csencsics D, Kalwij JM, Scheidegger C 2006 Quantifying dispersal and establishment limitation in a population of an epiphytic lichen. **Ecology** 87: 2037–2046.
- Gugerli F, Parducci L, Petit RJ 2005. Research Review – Ancient plant DNA: review and prospects. **New Phytologist** 166, 409–418. [research review]
- Holderegger R, Angelone S, Brodbeck S, Csencsics D, Gugerli F, Hoebee SE, Finkeldey R 2005. Application of genetic markers to the discrimination of European Black Poplar (*Populus nigra*) from American Black Poplar (*P. deltoides*) and Hybrid Poplars (*P. x canadensis*) in Switzerland. **Trees** 19: 743–748.
- Wagner H, Werth S, Holderegger R, Gugerli F, Hoebee SE, Scheidegger C 2005. Variogram analysis of the spatial genetic structure of continuous populations using multi-locus microsatellite data. **Genetics** 169: 1739–1732.
- Walser J-C, Holderegger R, Gugerli F, Hoebee S, Scheidegger C 2005. Microsatellites reveal regional population differentiation and isolation in *Lobaria pulmonaria*, an epiphytic lichen. **Molecular Ecology** 14: 457–467.
- Hilfiker K, Gugerli F, Schütz J-P, Rotach P, Holderegger R 2004. Low RAPD variation and female-biased sex ratio indicate genetic drift in small populations of the dioecious conifer *Taxus baccata* in Switzerland. **Conservation Genetics** 5: 357–365.
- * Hilfiker K, Holderegger R, Rotach P, Gugerli F 2004. Dynamics of genetic variation in *Taxus baccata*: local versus regional perspectives. **Canadian Journal of Botany** 82: 219–227.
- Walser J-C, Gugerli F, Holderegger R, Kuonen D, Scheidegger C 2004. How sexual are lichens? Recombination and clonal propagation in natural populations. **Heredity** 93: 322–329.
- Gugerli F, Bauert MR 2001. Growth and reproduction of *Polygonum viviparum* show weak responses to experimentally increased temperature at a Swiss Alpine site. **Botanica Helvetica** 111: 169–180.
- Gugerli F, Holderegger R 2001. Nunatak survival, *tabula rasa* and the influence of the Pleistocene ice-ages on plant evolution in mountain areas. **Trends in Plant Science** 6: 397–398. [conference report]
- Gugerli F, Senn J, Anzidei M, Madaghiele A, Büchler U, Sperisen C, Vendramin GG 2001. Chloroplast microsatellites and mitochondrial *nad1* intron 2 sequences indicate phylogeographic relationship of Swiss stone pine (*Pinus cembra*), Siberian stone pine (*P. sibirica*), and Siberian dwarf pine (*P. pumila*). **Molecular Ecology** 10: 1489–1497.

Gugerli F, Sperisen C, Büchler U, Brunner I, Brodbeck S, Palmer JD, Qiu Y-L 2001. The evolutionary split of Pinaceae from other conifers: evidence from an intron loss and a multigene phylogeny. **Molecular Phylogenetics and Evolution** 21: 167–175.

Gugerli F, Sperisen C, Büchler U, Magni F, Geburek T, Jeandroz S, Senn J 2001. Haplotype variation in a mitochondrial tandem repeat of Norway spruce (*Picea abies*) populations suggests a serious founder effect during postglacial re-colonization of the western Alps. **Molecular Ecology** 10: 1255–1263.

Award for best scientific publication within WSL (2001)

Sperisen C, Büchler U, Gugerli F, Mátyás G, Geburek T, Vendramin GG 2001. Tandem repeats in plant mitochondrial genomes: application to the analysis of population differentiation in the conifer Norway spruce. **Molecular Ecology** 10: 257–263.

Eichenberger K, Gugerli F, Schneller JJ 2000. Morphological and genetic diversity of Swiss common bean races (*Phaseolus vulgaris* L., Fabaceae) and their origin. **Botanica Helvetica** 110: 61–77.

Gugerli F 2000. Fortpflanzung bei *Saxifraga oppositifolia* und *S. biflora* unter alpinen Bedingungen – Fremdbestäubung als genetische Versicherung? **Bauhinia** 14: 53–65.

Sperisen C, Gugerli F, Büchler U, Mátyás G 2000. Comparison of two rapid DNA extraction protocols for gymnosperms for application in population genetic and phylogenetic studies. **Forest Genetics** 7: 133–136.

Arft AM, Walker MD, Gurevitch J, Alatalo J, Bret-Harte MS, Dale M, Diemer M, Gugerli F, Henry GHR, Jones MH, Hollister R, Jónsdóttir IS, Laine K, Lévesque E, Marion GM, Molau U, Mølgård P, Nordenhäll U, Raszhivin V, Robinson CH, Starr G, Stenström A, Stenström M, Totland Ø, Turner L, Walker L, Webber PJ, Welker JM, Wookey PA 1999. Responses of tundra plants to experimental warming: meta-analysis of the International Tundra Experiment. **Ecological Monographs** 69: 491–511.

Gugerli F, Eichenberger K, Schneller JJ 1999. Promiscuity in populations of the cushion plant *Saxifraga oppositifolia* in the Swiss Alps as inferred from RAPDs. **Molecular Ecology** 8: 453–461.

von Flüe I, Gugerli F, Holderegger R, Schneller JJ 1999. Genetic and morphological variability in alpine *Saxifraga oppositifolia* after colonization. **Feddes Repertorium** 110: 555–559.

Gugerli F 1998. Effect of elevation on sexual reproduction in alpine populations of *Saxifraga oppositifolia* (Saxifragaceae). **Oecologia** 114: 60–66.

Schneller JJ, Holderegger R, Gugerli F, Eichenberger K, Lutz E 1998. Patterns of genetic variation detected by RAPDs suggest single origin with subsequent mutations and long-distance dispersal in the apomictic fern *Dryopteris remota* (Dryopteridaceae). **American Journal of Botany** 85: 1038–1042.

Gugerli F 1997. Hybridization of *Saxifraga oppositifolia* L. and *S. biflora* All. (Saxifragaceae) in a mixed alpine population. **Plant Systematics and Evolution** 207: 255–274.

Gugerli F 1997. Sexual reproduction in *Saxifraga oppositifolia* L. and *Saxifraga biflora* All. (Saxifragaceae) in the Alps. **International Journal of Plant Sciences** 158: 274–281.

Stenström M, Gugerli F, Henry GHR 1997. Response of *Saxifraga oppositifolia* L. to simulated climate change at three contrasting latitudes. **Global Change Biology** 3: 44–54.

Gugerli F 1993. Samenbank als Grundlage für die Rückführung von Fettweisen zu extensiv genutzten, artenreichen Wiesen? **Botanica Helvetica** 103: 177–191.

Consortium-related contributions

- James J, Kastally C, Budde KB, González-Martínez SC, Milesi P, Pyhäjärvi T, Lascoux M, GenTree Consortium 2023. Between but not within-species variation in the Distribution of Fitness Effects. **Molecular Biology and Evolution** 40: msad228, DOI: 10.1093/molbev/msad228.
- Alvarez N, Manel S, Schmitt T, IntraBioDiv Consortium 2012. Contrasting diffusion of Quaternary gene pools across Europe: the case of the arctic-alpine *Gentiana nivalis* L. (Gentianaceae). **Flora** 207: 408–413.
- Meirmans PG, Goudet J, IntraBioDiv Consortium, Gaggiotti OE 2011. Ecology and life history affect different aspects of the population structure of 27 high-alpine plants. **Molecular Ecology** 20: 3144–3155.
- Winkler M, Tribsch A, Paun O, Englisch T, IntraBioDiv Consortium, Schönswetter P 2010. Pleistocene distribution range shifts were accompanied by breeding system divergence within *Hornungia alpina* (Brassicaceae) in the Alps. **Molecular Phylogenetics and Evolution** 54: 571–582.
- Coldea G, Stoică I-A, Pușcaș M, Ursu T, Oprea A, IntraBioDiv Consortium 2009. Alpine–subalpine species richness of the Romanian Carpathians and the current conservation status of rare species. **Biodiversity and Conservation** 18: 1441–1458.
- Alvarez, N., Arrigo, N., IntraBioDiv Consortium 2008. An R (CRAN) scripts collection for computing genetic structure similarities based on STRUCTURE 2 outputs. **Molecular Ecology Resources** 8: 757–762.
- Paun O, Schönswetter P, Winkler M, IntraBioDiv Consortium, Tribsch A 2008. Historical divergence versus contemporary gene flow: evolutionary history of the calcicole *Ranunculus alpestris* group (Ranunculaceae) in the European Alps and the Carpathians. **Molecular Ecology** 17: 4263–4275.
- Ehrich D, Gaudeul M, Assefa A, Koch M, Mummenhoff K, Nemomissa S, IntraBioDiv Consortium, Brochmann C 2007. Genetic consequences of Pleistocene range shifts: contrast between the Arctic, the Alps and the East African mountains. **Molecular Ecology** 16: 2542–2559.
- Manel S, Berthoud F, Bellemain E, Gaudeul M, Luikart G, Swenson JE, Waits LP, Taberlet P, IntraBioDiv Consortium 2007. A new individual-based spatial approach for identifying genetic discontinuities in natural populations. **Molecular Ecology** 16: 2031–2043.
- Mraz P, Gaudeul M, Gielly L, Choler P, Taberlet P, IntraBioDiv Consortium 2007. Genetic structure of *Hypochaeris uniflora* (Asteraceae) suggests vicariance in the Carpathians and rapid post-glacial colonization of the Alps from an eastern Alpine refugium. **Journal of Biogeography** 34: 2100–2114.
- Tribsch A, Taberlet P, IntraBioDiv Consortium 2006. The EU-Project IntraBioDiv – Tracking surrogates for intraspecific biodiversity: towards efficient selection strategies for the conservation of natural genetic resources using comparative mapping and modelling approaches. In: Price MA (ed.), *Global Change in Mountain Regions*, 148–150. Sapiens Publishing, Duncow, Kirkmahoe, Dumfrieshire.

Overview articles, book chapters, and conference papers (reviewed, non-ISI)

- * Bolliger J, Gugerli F 2017. Isoliert oder vernetzt? Der Einfluss der Landschaft auf den Genfluss. **WSL Berichte** 60: 23–29.
- Rellstab C, Fischer MC, Csencsics D, Gugerli F, Holderegger R 2017. Bedeutung der lokalen Anpassung in der Naturschutzgenetik. **WSL Berichte** 60: 31–37.

Gugerli F, Balkenhol N, Bolliger J 2016. Genfluss und Landschaftszerschneidung. In: Holderegger R, Segelbacher G (Eds.), *Naturschutzgenetik — Ein Handbuch für die Praxis*, 107–128. Haupt, Bern.

Gugerli F, Frank A, Rellstab C, Pluess AR, Moser B, Arend M, Sperisen C, Wohlgemuth T, Heiri C 2016. Genetische Variation und lokale Anpassung bei Waldbauarten im Zeichen des Klimawandels. In: Pluess AR, Augustin S, Brang P (eds.), *Wald und Klimawandel. Grundlagen für Adaptationsstrategien*. Bundesamt für Umwelt BAFU, Bern; Eidg. Forschungsanstalt WSL, Birmensdorf; Haupt, Bern, 93–113. (available also in French)

Gugerli F, Holderegger R 2016. Genetische Methoden. In: Holderegger R, Segelbacher G (Eds.), *Naturschutzgenetik — Ein Handbuch für die Praxis*, 183–202. Haupt, Bern.

* Rellstab C, Pluess AR, Gugerli F 2016. Die genetische Basis der lokalen Anpassung von Waldbauarten im Zeichen des Klimawandels. **Schweizerische Zeitschrift für Forstwesen** 333–340.

Sperisen C, Pluess, AR, Arend M, Brang P, Gugerli F, Heiri C 2016. Erhaltung genetischer Ressourcen im Schweizer Wald — Heutige Situation und Handlungsbedarf angesichts des Klimawandels. In: Pluess AR, Augustin S, Brang P (eds.), *Wald und Klimawandel. Grundlagen für Adaptationsstrategien*. Bundesamt für Umwelt BAFU, Bern; Eidg. Forschungsanstalt WSL, Birmensdorf; Haupt, Bern, 367–383. (available also in French)

Kamm U, Gugerli F, Rotach P, Edwards PJ, Holderegger R 2012. Selten & zerstreut: Auswirkungen auf den Paarungserfolg des Speierlings. **Schweizerische Zeitschrift für Forstwesen** 163: 130–136.

Gugerli F, Sperisen C 2010. Genetische Struktur von Waldbäumen im Alpenraum als Folge (post)glazialer Populationsgeschichte. **Schweizerische Zeitschrift für Forstwesen** 161: 207–215.

Tribsch A, Englisch T, Gugerli F, Holderegger R, Niklfeld H, Steinmann K, Thiel-Egenter C, Zimmermann NE, Taberlet P, IntraBioDiv Consortium 2010. Integrating data across biodiversity levels; the project IntraBioDiv. In: Körner C, Spehn EM (eds.), *Data Mining for Global Trends in Mountain Biodiversity*, 89–105. CRC/Taylor & Francis, Boca Raton.

Gugerli F 2009. Können genetische Grundlagen zur nachhaltigen Waldnutzung beitragen? **Forum für Wissen** 2009: 103–109.

Gugerli F, Jacob G, Bollmann K 2008. Molekulare Marker erzählen aus dem Geschichtenbuch: Auerhuhn-Populationsgenetik in den Schweizer Alpen. **Ornithologischer Beobachter** 105: 77–84.

Duelli P, Baur P, Buchecker M, Gugerli F, Holderegger R, Wohlgemuth T 2007. The role of value systems in landscape research. In: Kienast F, Ghosh S, Wildi O (eds.), *A Changing World: Challenges for Landscape Research*, 27–34. Springer, Dordrecht.

Holderegger R, Gugerli F, Scheidegger C, Taberlet P 2007. Integrating population genetics with landscape ecology to infer spatio-temporal processes. In: Kienast F, Ghosh S, Wildi O (eds.), *A Changing World: Challenges for Landscape Research*, 145–156. Springer, Dordrecht.

Gugerli F, Sperisen C, Mátyás G, Senn J, Anzidei M, Vendramin GG 2002. Molecular markers help to reveal postglacial re-colonisation routes of forest tree species in the Alpine region. In: Bottrarin R, Tappeiner U (eds.), *Interdisciplinary Mountain Research*, 156–161. Blackwell Science, Berlin.

Other publications (internal review only)

* Dauphin B, Rellstab C, Gugerli F 2024. Kann die Arve mit dem Klimawandel Schritt halten? **Vierteljahresschrift der Naturforschenden Gesellschaft in Zürich** 169: 4–7.

Gugerli F (2024) Fernsicht. **N & L inside** 2/24: 3.

Gugerli F (2024) Für die Arve wird es warm und trocken – und eng. **Cratschla** 2/24: 9.

Gugerli F, Brodbeck S, Bebi P, Bollmann K, Dauphin B, Gossner M, Krumm F, Peter M, Queloz V, Reiss G, Rellstab C, Stofer S, von Arx G, Wasem U, Zweifel R 2024. *Il dschember – purtret d'un bös-ch da god da muntogna. Merkblatt für die Praxis* Romantsch vallader 72: 1–16.

* Fischer MC, Ryffel A, Ruprecht K, Gugerli F, Holderegger R, Widmer A 2023. *Pilotstudie für ein Monitoring der genetischen Vielfalt in der Schweiz: Schlussbericht*. ETH Zürich, BAFU, Zürich, Bern, 67 pg.

* Terzer E, Schmid M, Bauert B, Weidmann-Csencsics D, Brodbeck S, Birrer S, Bolliger J, Gugerli F 2024. Genetische Vielfalt des Schachbrettfalters. **N & L inside** 1/24: 23–24.

* Brodbeck S, Bott G, Stucki J, von Arx G, Gugerli F 2023. Die Methusalem-Arven von Celerina unter der wissenschaftlichen Lupe. **Bündner Wald** 03/23: 50–54.

* Buser C, Mosimann M, Iosifescu-Enescu I, Woodcock S, Gugerli F 2023. Nutzen einer nationalen Datenbank zur innerartlichen genetischen Vielfalt für die Naturschutzpraxis. **N & L inside** 2/23: 33–40.

* Gmünder N, Brodbeck S, Rehnus M, Bollmann K, Gugerli F 2023. Mobile Schneehasen. **N & L inside** 2/23: 21–22.

Gugerli F, Brodbeck S, Bebi P, Bollmann K, Dauphin B, Gossner M, Krumm F, Peter M, Queloz V, Reiss G, Rellstab C, Stofer S, von Arx G, Wasem U, Zweifel R 2022. *Die Arve — Portrait eines Gebirgswaldbaus. Merkblatt für die Praxis* 72: 1–16.

Gugerli F, Brodbeck S, Bebi P, Bollmann K, Dauphin B, Gossner M, Krumm F, Peter M, Queloz V, Reiss G, Rellstab C, Stofer S, von Arx G, Wasem U, Zweifel R 2022. *L'arole — portrait d'un montagnard. Notice pour le praticien* 72: 1–16.

Gugerli F 2022. *Cardamine dentata*: Genetische Zuordnung passt zu morphologischer Bestimmung. **FloraCH** 14: 3.

Gugerli F, Folly C, Kramer M, Brodbeck S, Graf R, Csilléry K, Opgenoorth L, Sperisen C, Martínez-Sancho E, Rellstab C 2022. Dank genetischer Vielfalt ist die Weisstanne fit für die Zukunft. **Wald und Holz** 11/22: 11–14.

Gugerli F, Folly C, Kramer M, Brodbeck S, Graf R, Csilléry K, Opgenoorth L, Sperisen C, Martínez-Sancho E, Rellstab C 2022. Grâce à la diversité génétique, le sapin est prêt pour l'avenir. **La Forêt** 11/22: 9–12.

Rehnus M, Bollmann K, Gugerli F, Brodbeck S, Schenker L 2022. Schneehasenforschung: Bestandesdynamik und geschlechterspezifische Lebensraumnutzung. **Jagd in Tirol** 74: 12–17.

Rehnus M, Bollmann K, Gugerli F, Brodbeck S, Schenker L 2022. Schneehase: Bestandesschwankungen und Lebensraumnutzung. **info fauna VS** 41: 2–7.

Fischer MC, Pärli R, Gugerli F, Holderegger R, Lieberherr E, Widmer A 2020. *Machbarkeitsstudie zur Untersuchung des Zustands und der Veränderung der genetischen Vielfalt: Vernetzung, Inzucht und Anpassungsfähigkeit*. ETH Zürich, BAFU, Zürich, Bern, 67 pg.

Fischer MC, Ruprecht K, Gugerli F, Holderegger R, Widmer A 2021. Pilotstudie für ein Monitoring der genetischen Vielfalt in der Schweiz. **N&L Inside** 1/21: 11–13.

Gugerli F 2020. Hattemer HH, Ziehe M (2018) Erhaltung forstgenetischer Ressourcen — Grundlagen und Beispiele (Buchbesprechung). **Schweizerische Zeitschrift für Forstwesen** 171: 363–364.

Reutimann O, Gugerli F, Rellstab C 2020. Genetischer Fingerabdruck – ein Werkzeug zur Bestimmung von Art und Durchmischungsgrad bei heimischen Eichen. **Wald und Holz** 06/20: 21–25.

- Reutimann O, Gugerli F, Rellstab C 2020. L'empreinte génétique – un outil d'identification de l'espèce et du taux de mélange des chênes indigènes. **La Forêt** 5/20: 12–15.
- * Schenker L, Brodbeck S, Bollmann K, Rehnus M, Gugerli F 2020. Nicht-invasives genetisches Monitoring: Einblick in das Leben heimlicher Tierarten. **N&L Inside** 3/20: 33–39.
- * Schenker-Schürz L, Rehnus M, Brodbeck S, Bollmann K, Gugerli F 2020. Neue Erkenntnisse dank genetischen Methoden. **Cratschla** 2/20: 18–21.
- Gugerli F, Vaupel A, Ellenbroek T, Nagel D, Muller R, Luqman H, Brodbeck S, Bolliger J 2017. Amphibien und Autobahnen: Eine Trennungsgeschichte? **N&L Inside** 1/17: 25–30.
- Gugerli F, Rellstab C 2017. Genetische Forschung mit Misoxer Nadelbäumen. **Terra Grischuna** 28–31.
- Gugerli F 2016. Editorial: Waldbiodiversität auf genetischer Ebene. **Schweizerische Zeitschrift für Forstwesen** 167: 307.
- Gugerli F, Hayes S 2016. Evoltree training activities. In: Kremer A, Hayes S, González-Martínez SC (Eds.), *Evolution of trees and forest communities: ten years of the EVOLTREE network*, 27–29. PG Edition, Bordeaux.
- Lefèvre F, Pichot C, Beuker E, Kowalczyk J, Matras J, Ziehe M, Villar M, Peter M, Gugerli F, Orazio C, Cordero R, Alía R, von Halder I, González-Martínez SC, Kremer A 2016. Intensive Study Sites. In: Kremer A, Hayes S, González-Martínez SC (Eds.), *Evolution of trees and forest communities: ten years of the EVOLTREE network*, 11–14. PG Edition, Bordeaux.
- * Bolliger J, Junge X, Wülser G, Pohl C, Vaupel A, Gugerli F, Teilnehmende der GeneMig Workshops 2015. Herausforderungen und Chancen in der Zusammenarbeit Praxis–Wissenschaft — ein Erfahrungsbericht. **N&L Inside** 2/15: 24–28.
- Bonfils P, Rigling A, Brändli U-B, Brang P, Forster B, Engesser R, Gugerli F, Junod P, Müller R, Günthardt-Goerg M 2015. *Die Eiche im Klimawandel — Potenzial und Zukunftschancen einer Baumart*. **Merkblatt für die Praxis** 55: 1–12.
- Gugerli F, Holderegger R, Bolliger M 2015. Genetische Ressourcen. In: Rigling A, Schaffer HP (Eds.), *Waldbericht 2015. Zustand und Nutzung des Schweizer Waldes*. Bundesamt für Umwelt (BAFU), Bern, and Eidg. Forschungsanstalt (WSL), Birmensdorf, pp. 82–83.
- * Holderegger R, Bolliger M, Gugerli F 2015. Wie weit fliegen Pollenkörner? **Wald und Holz** 3/15: 31–33.
- * Holderegger R, Bolliger M, Gugerli F 2015. Jusqu'où les grains de pollen s'envolent-ils? **La Forêt** 2/15: 17–19.
- * Schmid M, Birrer S, Bolliger J, Csencsics D, Gugerli F 2015. Monitoring genetischer Vielfalt: Fallbeispiel Schachbrettfalter. **N&L Inside** 1/15: 19–24.
- Frei M, Csencsics D, Bühler C, Gugerli F, Bolliger J 2014. Wie gut vernetzt sind Vorkommen der Kreuzkröte in einer landwirtschaftlich geprägten Landschaft? **N&L Inside** 4/14: 16–20.
- * Bolliger J, Junge X, Vaupel A, Gugerli F 2013. Wissenschaft und Praxis im Dialog über Landschaftsgenetik. **N&L Inside** 1/13: 16–19.
- * Brodbeck S, Cioldi F, Gugerli F 2013. Recherche génétique de traces dans l'arorière. **La Forêt** 1/13: 11–15.
- Gugerli F, Holderegger R 2013. Die Alpen als Barriere und Schmelzriegel. **Hotspot** 27: 12–13.
- * Brodbeck S, Cioldi F, Gugerli F 2012. Genetische Spurensuche im Arvenwald. **Wald und Holz** 5/12: 31–34.
- Hepenstrick D, Gugerli F, Holderegger R, Senn J, Gremminger T, Thiel D 2010. Fragmentierung in einem Wildtierkorridor von nationaler Bedeutung. **N&L Inside** 3/10: 21–23.
- * Brodbeck S, Gugerli F 2010. Die Arve—Königin der Alpen. **Alpen** 2010/06: 32–37. (auch in Französisch)

Hilfiker K, Gugerli F, Holderegger R 2009. Ist das Geschlechterverhältnis der Eibe von praktischer Bedeutung? In: Scheeder T (Ed.), **Der Eibenfreund**, 74–77.

Gugerli F 2006. Wenn Alpenpflanzen fremdgehen. **Der Gartenbau** 10/06, 6–8.

* Holderegger R, Gugerli F 2006. Moderne Forschung ist auf Sammlungen angewiesen. **Hotspot** 13: 13.

Rigling A, Dobbertin M, Bürgi M, Gimmi U, Graf Pannatier E, Gugerli F, Heiniger U, Polomski J, Rebetez M, Rigling D, Weber P, Wermelinger B, Wohlgemuth T 2006. Verdrängen Flaumeichen die Walliser Waldföhren? **Merkblatt für die Praxis**, Eidg. Forschungsanstalt WSL, Birmensdorf, 16 pg.

Gugerli F, Brodbeck S, Holderegger R 2005. Die unerträgliche Leichtigkeit, eine reine Eiche zu sein. **Informationsblatt Forschungsbereich Landschaft** 63: 1–5.

Gugerli F 2005. Auch Alpenpflanzen gehen fremd. **Alpen (SAC)** 2005/06: 22–26.

Wirth L, Angelone S, Hoebee SE, Arnold U, Düggelin C, Hilfiker K, Brodbeck S, Gugerli F, Holderegger R 2005. Fruchtbarkeit trotz Einsamkeit. **Wald und Holz** 2005/2: 33–35.

Wirth L, Hoebee SE, Arnold U, Düggelin C, Brodbeck S, Rotach P, Gugerli F, Holderegger R 2005. Destination unbekannt? **Corminaria** 23: 3–5.

Ulber M, Gugerli F, Bozic G 2004. *EUFORGEN Technical Guidelines for genetic conservation and use for Swiss stone pine* (*Pinus cembra*). International Plant Genetic Resources Institute, Rome.

Hilfiker K, Ulber M, Gugerli F, Rotach P, Bonfils P, Holderegger R 2003. Mehr Weibchen als Männchen. **Wald und Holz** 2003/2: 44–46.

Gugerli F 2002. Hansen: Bioinformatik. Ein Leitfaden für Naturwissenschaftler (book review). **Schweizerische Zeitschrift für Forstwesen** 153: 79.

Gugerli F 2001. Reaktion von Tundrapflanzen auf Klimaerwärmung – Resultate aus einem circum-polar-alpinen Grossversuch. In: Haudenschild R (ed.) *Die Polarforschung als Schlüssel zum Verständnis der globalen Veränderungen*, 31–38. **Schweizerische Kommission für Polar-forschung SKP**, Bern.

Gugerli F 2001. Bell & Hemsley: Green Plants – Their Origin and Diversity (book review). **Schweizerische Zeitschrift für Forstwesen** 152: 258.

Gugerli F 2000. Körner: Alpine Plant Life (book review). **Vierteljahresschrift der Naturfor-schenden Gesellschaft in Zürich** 145: 64.

Gugerli F 1998. Grössere Konkurrenz in der arktischen Flora. **Neue Zürcher Zeitung**, 25.11.98: p. 69.

Gugerli F 1990. Mensch als Landschaftsschädling im Hochgebirge. **Walliser Bote**, 1.Juni 1990: p. 16.