

PUBLICATION LIST – DR. PHIL. FELIX GUGERLI

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

Bibliographic records as of December 31, 2018 (ISI Core Collection)

Number of articles listed in Web of Science: 99 (+ 3 in press)

Number of citations: 3611 (average 36.47)

h-index: 36

- 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.
- * Csilléry K, Sperisen C, Ovaskainen O, Buchmann N, Widmer A, Gugerli F. 2019. Adaptation to local climate in a multi-trait space: evidence from silver fir (*Abies alba* Mill.) populations across a heterogeneous environment. **Heredity** in press. (presubmission at **bioRxiv** doi: 10.1101/292540)
- Mosca E, Cruz F, Gómez Garrido J, Bianco L, Rellstab C, Bazin E, 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, Westergren M, Ziegenhagen B, Alioto T, Gugerli F, Heinze B, Höhn M, Troggio M, Neale DB 2019. A reference genome sequence for the European silver fir (*Abies alba*): a community-generated genomic resource. **G3—Genes, Genomes, Genetics** in press.
- * 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 *Arabidopsis 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. DNA extraction from the world’s oldest Late Glacial pine forest using novel techniques to clean wood surfaces and authenticate endogenous ancient DNA. **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 *Arabidopsis 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. 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 persistence as a driver for directed food caching behavior. **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]
- 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 *Arabidopsis 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, Pellicchia M, Perico G, Piekos-Mirkowa H, Prosser F, Puscas M, Ronikier M, Scheuerer M, Schneeweiss GM, Schönswetter P, Schratt-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, Schönswetter 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, Gaudeul M, Gielly L, Jogan N, Linder HP, Negrini R, Niklfeld H, Pellicchia M, Rioux D, Schönswetter 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. **Landscape 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, Pellicchia M, Rioux D, Schönschwetter P, Schüpfer 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, Pellicchia M, Rioux D, Ronikier M, Schönschwetter 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, Latalowa 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, 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.
- 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, Mølgaard 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 Fettweiden zu extensiv genutzten, artenreichen Wiesen? **Botanica Helvetica** 103: 177–191.

Additional, consortium-related contributions (in alphabetical order)

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.

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.

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.

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.

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.

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.

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.

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, Dumfriesshire.

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.

Overview articles, book chapters, and conference papers (reviewed, partly 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 Waldbaumarten 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 Waldbaumarten 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.
- Gugerli F 2009. Können genetische Grundlagen zur nachhaltigen Waldnutzung beitragen? **Forum für Wissen** 2009: 103–109.
- 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, 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: Bottarin R, Tappeiner U (eds.), *Interdisciplinary Mountain Research*, 156–161. Blackwell Science, Berlin.
- 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 2000. Fortpflanzung bei *Saxifraga oppositifolia* und *S. biflora* unter alpinen Bedingungen – Fremdbestäubung als genetische Versicherung? **Bauhinia** 14: 53–65.

Other publications (not reviewed)

- 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 Misoxyer Nadelbäumen. **Terra Grischuna** 28–31.
- Gugerli F 2016. Editorial Waldbiodiversität auf genetischer Ebene. **Schweizerische Zeitschrift für Forstwesen** 307.
- Gugerli F, Hayes S 2016. Eoltree 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.
- 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*. **Merckblatt für die Praxis**, Eidg. Forschungsanstalt WSL, Birmensdorf, 12 pg.
- 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.
- 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.
- 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'ou 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.
- Gugerli F, Holderegger R 2013. Die Alpen als Barriere und Schmelztiegel. **Hotspot** 27: 12–13.
- Bolliger J, Junge X, Vaupel A, Gugerli F 2013. Wissenschaft und Praxis im Dialog über Landschafts-genetik. **N&L Inside** 1/13: 16–19.
- Brodbeck S, Cioldi F, Gugerli F 2013. Recherche génétique de traces dans l'arolière. **La Forêt** 1/13: 11–15.
- 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.
- 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, Düggelein 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, Düggelein 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: Haudenschield R (ed.) *Die Polarforschung als Schlüssel zum Verständnis der globalen Veränderungen*, 31–38. **Schweizerische Kommission für Polarforschung 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 Naturforschenden Gesellschaft in Zürich** 145: 64.
- Gugerli F 1998. Grössere Konkurrenz in der arktischen Flora. **Neue Zürcher Zeitung**, 25.11.98: p. 69.