

Fabio Marroni



Topics I love:
Genetics
Bioinformatics
(Meta)Genomics
Statistical Genetics



Personal information

Work address University of Udine, via delle Scienze 206, 33100 Udine, Italy
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Employment history

April, 2nd 2019 – Present

Occupation or position held Assistant Professor B (Fixed term, L. 240/10)
Main activities and responsibilities Bioinformatics analysis of genomic data
Name and address of employer University of Udine, Via Palladio 8, 33100 Udine, Italy

December, 21st 2017 – April, 1st 2019

Occupation or position held Bioinformatics Operations Manager
Main activities and responsibilities Coordination of Bioinformatics activities
Name and address of employer IGA Technology Services s.r.l., Via J. Linussio 51, 33100 Udine, Italy

December, 21st 2012 – December, 20th 2017

Occupation or position held Assistant Professor A (Fixed term, L. 240/10)
Main activities and responsibilities Analysis of genomic data, coordination of PhD students and Post-Docs
Name and address of employer University of Udine, Via Palladio 8, 33100 Udine, Italy

August 2012 – December 2012

Occupation or position held Research collaborator
Main activities and responsibilities Bioinformatic data analysis
Name and address of employer IGA Technology Services S.r.l., Via Linussio 51, 33100 Z.I.U. Udine, Italy

August 2008 – August 2012

Occupation or position held Lab assistant with research duties
Main activities and responsibilities Collaboration to the research project ENERGYPOPLAR
Name and address of employer Institute of Applied Genomics (IGA), Via Linussio 51, 33100 Z.I.U. Udine, Italy

June 2005 – July 2008

Occupation or position held Researcher, Section Manager
Main activities and responsibilities Genetic Epidemiology and Biostatistics
Name and address of employer EURAC research, Viale Druso 1, 39100 Bolzano Italy

January 2005 – September

2005	Occupation or position held Main activities and responsibilities Name and address of employer	On site Collaborator Genetic Epidemiology and Biostatistics NIH/NHGRI, IDR8, 333 Cassell Drive, 21224 Baltimore, MD, USA
March 2000 – June 2001	Occupation or position held Main activities and responsibilities Name and address of employer	Collaboration to Research Activity Photobiology and Biophysics Institute of Biophysics, CNR (National Research Council), Area Della Ricerca, Via G. Moruzzi 1 - 56124 Pisa, Italy
Grants		
2019		Scaling up Genomics in Aquaculture, Short Mission Grant, University of Udine
“Abilitazione”		For the purposes of the Italian law, I hold the “abilitazione” for tenure track associate professor in genetics (Genetica, 05/I1) and agricultural genetics (Chimica Agraria, Genetica Agraria e Pedologia, 07/E1), valid until 10/04/2023
Teaching		
2020		Teacher of Genetics for first year undergraduate students in Environmental and Natural Sciences, University of Udine (Biologia – AG028).
2020		Teacher of Applied Bioinformatics for undergraduate students of the School for Advanced studies of the University of Udine (SUP0302).
2020		Seminar series (two lessons) in Coffee Genetics – Master in Coffee Economics and Science “Ernesto Illy” (Trieste, Italy, 6 th and 11 th February)
2019		Seminar series (three lessons) in Coffee Genetics – Master in Coffee Economics and Science “Ernesto Illy” (Trieste, Italy, 16 th , 23 rd , and 30 th January)
2018		Seminar series (three lessons) in Coffee Genetics – Master in Coffee Economics and Science “Ernesto Illy” (Trieste, Italy, 17 th and 25 th January)
2017		Seminar “Mapping the Molecular phenotype: eQTL and sQTL analysis”, in the seminar series Frontiers in Biotechnology, held at Scuola Superiore Sant’Anna, Pisa, Italy, 29 th November. Teacher (eQTL mapping) in the Course organized by the Italian Society of Agricultural Genetics “GWAS: from theory to practice”, Canazei July 4th-7th. Seminar series (three lessons) in Coffee Genetics – Master in Coffee Economics and Science “Ernesto Illy” (Trieste, Italy, 2 nd , 3 rd and 5 th May)
2016		Seminar series (two lessons) on analysis of NGS data for undergraduate students. Course “Genome analysis and Bioinformatics” (on behalf of Michele Morgante).
2015		Seminar series (three lessons) on analysis of NGS data for undergraduate students. Course “Genome analysis and Bioinformatics” (on behalf of Michele Morgante).
2014		One day teaching in Scuola Superiore Sant’Anna (Pisa, Italy) course in Applied Bioinformatics (Graduate and Undergraduate students) Seminar series (16 hours) in NGS analysis of structural variants in the Course PON Ricerca e Competitività (PONa3_00134/F5) (November 20 th and 21 st CRA, Turi, Italy) Teacher of the short course “Introduction to Genomics” in the framework of the project: “MODULI FORMATIVI DALLA SCUOLA ALL’UNIVERSITA” (Three lessons)
2013		Seminar series (three lessons) on Fst, Hardy-Weingberg equilibrium, and nucleotide diversity for undergraduate students. Course “Genetic Resources in Agriculture” (on behalf of Raffaele Testolin). Seminar series (two lessons) on RNAseq for undergraduate students. Course “Genome analysis and Bioinformatics” (on behalf of Michele Morgante). One day teaching in the Bioinformatics Module in the Course PON Ricerca e Competitività 2007-2013 (01_01623/F) One day teaching in Animal Genetics Module in the Course PON Onev – Corso Esperto in Omiche Animali
2012		Seminar series (two lessons) on RNAseq for undergraduate students. Course “Genome analysis and Bioinformatics” (on behalf of Michele Morgante).

2008-2010 One day teaching in Scuola Superiore Sant'Anna (Pisa, Italy) course in Applied Bioinformatics (Graduate and Undergraduate students)
 Contract professor of the course "Genetics (BIO/05)" for first year undergraduate students of "Veterinary Medicine" and "Environmental and Natural Sciences", University of Udine, Italy.

2008 Seminar series (two lessons) on Hardy-Weingberg equilibrium for undergraduate students. Course "Genetic Resources in Agriculture" (on behalf of Raffaele Testolin).

PhD tutoring Co-supervisor (together with Prof. Michele Morgante) of the PhD projects "Building Catalogues of Genetic Variation in Poplar" (PhD candidate, Sara Pinosio, 2012), "Characterisation of the pan-genome of *Vitis vinifera* using Next Generation Sequencing" (PhD candidate Gabriele Magris, 2014), "Identification and mapping of loci controlling viability in *Vitis vinifera* crosses (PhD candidate Alice Fornasiero, 2016) and "Identification of structural variation in *Zea mays*: use of paired-end mapping and development of a novel algorithm based on split reads" (PhD candidate Ettore Zapparoli, 2016).

Education and training

2005: PhD Experimental and Molecular Oncology
 Thesis La predizione dello stato di portatore di mutazioni germinali in *BRCA1* e *BRCA2* - Valutazione dei modelli esistenti, stima delle penetranze, ed elaborazione di un modello adattato alle popolazioni italiane (Predicting carrier status for mutations in *BRCA1* and *BRCA2* - Evaluation of existing models, penetrance estimation, and development of a model tailored for the Italian populations).

University University of Pisa
 Date 08/04/05
 Tutor Silvano Presciuttini

1999: MSc Biology (110/110 *cum laude*)
 Thesis Risposta e fotorisposta di *Ophryoglena flava* a radiazioni ultraviolette (Response and Photoresponse of *Ophryoglena flava* to UV radiations)

University University of Pisa
 Date 19/07/1999
 Tutor Giuliano Colombetti and Roberto Marangoni

Personal skills and competences

Mother tongue Italian

Other languages English, German

Self-assessment
European level ()*

English
German

Understanding				Speaking				Writing	
Listening		Reading		Spoken interaction		Spoken production			
C1	Proficient	C1	Proficient	C1	Proficient	C1	Proficient	C1	Proficient
B1	Independent	B1	Independent	B1	Independent	B1	Independent	B1	Independent

(*) *Common European Framework of Reference for Languages*

Citation Indices

Web of Science: Total citations **5825**, H-index **26**

Google Scholar: Total citations **8307**, H-index **30**

Scopus: Total citations **5765**, H-index **25**

Peer Reviewed Publications

1. Misson G, Mainardis M, Marroni F, Peressotti A, Goi D: **Environmental methane emissions from seagrass wrack and evaluation of salinity effect on microbial community composition**. *Journal of Cleaner Production*. **2020** 12546
2. Ciani E, Mastrangelo S, Da Silva A, Marroni F, Ferenčaković M, Ajmone-

- Marsan P, Baird H, Barbato M, Colli L, Delvento C, Dovenski T, Gorjanc G, Hall SJG, Hoda A, Li M, Marković B, McEwan J, Moradi MH, Ruiz-Larrañaga O, Ružić-Muslić D, Šalamon D, Simčič M, Stepanek O, Econogene Consortium, Sheephapmap Consortium, Curik I, Cubric-Curik V, Lenstra JA. **On the origin of European sheep as revealed by the diversity of the Balkan breeds and by optimizing population-genetic analysis tools.** *Genetics Selection Evolution.* **2020** 52, 1-14.
3. Byadgi O, Marroni F, Dirks R, Massimo M, Volpatti D, Galeotti M, Beraldo P. **Transcriptome Analysis of *Amyloodinium ocellatum* Tomonts Revealed Basic Information on the Major Potential Virulence Factors.** *Genes* 11 (11), 1252
 4. Pinosio S, Marroni F, Zuccolo A, Vitulo N, Mariette S, Sonnante G, Aravanopoulos FA, Ganopoulos I, Palasciano M, Vidotto M, Magris G, Iezzoni A, Vendramin GG, Morgante M. **A draft genome of sweet cherry (*Prunus avium* L.) reveals genome-wide and local effects of domestication.** *The Plant Journal.* 103 (4), 1420-1432
 5. Miller B, Morse A, Borgert JE, Liu Z, Sinclair K, Gamble G, Zou F, Newman J, Leon-Novelo L, Marroni F, McIntyre L. **Testcrosses are an efficient strategy for identifying cis regulatory variation: Bayesian analysis of allele specific expression (BASE).** *bioRxiv.* <https://doi.org/10.1101/2020.10.01.322362>
 6. Marino M, Dubsky de Wittenau G, Saccà E, Cattonaro F, Spadotto A, Innocente N, Radovic S, Piasentier E, Marroni F. **Metagenomic profiles of different types of Italian high-moisture Mozzarella cheese.** *Food microbiology* **2019** 79:123-131.
 7. Cattonaro F, Spadotto A, Radovic S, Marroni F. **Do you cov me? Effect of coverage reduction on species identification and genome reconstruction in complex biological matrices by metagenome shotgun high-throughput sequencing.** *F1000 research* **2020** 7:1767.
 8. Buoso S, Pagliari L, Musetti R, Martini M, Marroni F, Schmidt W, Santi S. **'Candidatus Phytoplasma solani' interferes with the distribution and uptake of iron in tomato.** *BMC genomics* **2019** 20(1):703.
 9. Scaglione D, Pinosio S, Marroni F, Di Centa E, Fornasiero A, Magris G, Scalabrin S, Cattonaro F, Taylor G, Morgante M. **Single primer enrichment technology as a tool for massive genotyping: a benchmark on black poplar and maize.** *Annals of botany.* **2019** 124(4):543-552.
 10. Valentinuzzi F, Venuti S, Pii Y, Marroni F, Cesco S, Hartmann F, Mimmo T, Morgante M, Pinton R, Tomasi N, Zanin L. **Common and specific responses to iron and phosphorus deficiencies in roots of apple tree (*Malus × domestica*).** *Plant Mol Biol.* **2019** 101 (1-2), 129-148.
 11. Magris G, Di Gaspero G, Marroni F, Zenoni S, Tornielli GB, Celii M, De Paoli E, Pezzotti M, Conte F, Paci P, Morgante M. **Genetic, epigenetic and genomic effects on variation of gene expression among grape varieties.** *The Plant Journal.* **2019** 99(5):895-909.
 12. Zanin L, Venuti S, Marroni F, Franco A, Morgante M, Pinton R, Tomasi N. **Physiological and RNA sequencing data of white lupin plants grown under Fe and P deficiency.** *Data in brief.* **2019.** 25:104069
 13. Venuti S, Zanin L, Marroni F, Franco A, Morgante M, Pinton R, Tomasi N. **Physiological and transcriptomic data highlight common features between iron and phosphorus acquisition mechanisms in white lupin roots.** *Plant Science.* 2019. 285:110-121.
 14. Leon-Novelo L, Gerken AR, Graze RM, McIntyre LM, Marroni F. **Direct Testing for Allele-Specific Expression Differences Between Conditions.** *G3: Genes, Genomes, Genetics* **2017** doi: 10.1534/g3.117.300139
 15. Marroni F, Scaglione D, Pinosio S, Policriti A, Miculan M, Di Gaspero G, Morgante M. **Reduction of heterozygosity (ROH) as a method to detect mosaic structural variation.** *Plant Biotechnol J.* **2017** Jan 5. doi: 10.1111/pbi.12691.
 16. Balestrini R, Salvioli A, Dal Molin A, Novero M, Gabelli G, Paparelli E, Marroni F, Bonfante P. **1. Impact of an arbuscular mycorrhizal fungus versus a mixed microbial inoculum on the transcriptome reprogramming of grapevine roots.** *Mycorrhiza.* **2016** Dec 27. doi: 10.1007/s00572-016-0754-8.

17. Pinosio S, Giacomello S, Faivre-Rampant P, Taylor G, Jorge V, Le Paslier MC, Zaina G, Bastien C, Cattonaro F, Marroni F, Morgante M. **Characterization of the Poplar Pan-Genome by Genome-Wide Identification of Structural Variation.** *Mol Biol Evol.* **2016** Oct;33(10):2706-19. doi: 10.1093/molbev/msw161
18. Giordani T, Cossu RM, Mascagni F, Marroni F, Morgante M, Cavallini A, Natali L. **Genome-wide analysis of LTR-retrotransposon expression in leaves of Populus.** *Tree Genetics and Genomes* **2016** 12;4:1-14.
19. Ciani E, Lasagna E, D'Andrea M, Alloggio I, Marroni F, Ceccobelli S, Delgado Bermejo JV, Sarti FM, Kijas J, Lenstra JA, Pilla F; International Sheep Genomics Consortium. **Merino and Merino-derived sheep breeds: a genome-wide intercontinental study** *Genet Sel Evol.* **2015** Aug 14;47:64
20. Pinosio S, González-Martínez SC, Bagnoli F, Cattonaro F, Grivet D, Marroni F, Lorenzo Z, Pausas JG, Verdú M, Vendramin GG. **First insights into the transcriptome and development of new genomic tools of a widespread circum-Mediterranean tree species, *Pinus halepensis* Mill.** *Mol Ecol Resour.* **2014** Jan 22. doi: 10.1111/1755-0998.12232.
21. International Peach Genome Initiative, Verde I, Abbott AG, Scalabrin S, Jung S, Shu S, Marroni F, Zhebentyayeva T, Dettori MT, Grimwood J, Cattonaro F, Zuccolo A, Rossini L, Jenkins J, Vendramin E, Meisel LA, Decroocq V, Sosinski B, Prochnik S, Mitros T, Policriti A, Cipriani G, Dondini L, Ficklin S, Goodstein DM, Xuan P, Del Fabbro C, Aramini V, Copetti D, Gonzalez S, Horner DS, Falchi R, Lucas S, Mica E, Maldonado J, Lazzari B, Bielenberg D, Pirona R, Miculan M, Barakat A, Testolin R, Stella A, Tartarini S, Tonutti P, Arús P, Orellana A, Wells C, Main D, Vizzotto G, Silva H, Salamini F, Schmutz J, Morgante M, Rokhsar DS. **The high-quality draft genome of peach (*Prunus persica*) identifies unique patterns of genetic diversity, domestication and genome evolution.** *Nat Genet.* **2013** May;45(5):487-94.
22. Vanholme B, Cesarino I, Goeminne G, Kim H, Marroni F, Van Acker R, Vanholme R, Morreel K, Ivens B, Pinosio S, Morgante M, Ralph J, Bastien C and Boerjan W. **Breeding with rare defective alleles: a natural *Populus nigra* HCT mutant with modified lignin as a case study.** *New Phytol.* **2013** May;198(3):765-76.
23. Minelli C, De Grandi A, Weichenberger CX, Gögele M, Modenese M, Attia J, Barrett JH, Boehnke M, Borsani G, Casari G, Fox CS, Freina T, Hicks AA, Marroni F, Parmigiani G, Pastore A, Pattaro C, Pfeufer A, Ruggeri F, Schwienbacher C, Taliun D, Pramstaller PP, Domingues FS, Thompson JR. **Importance of different types of prior knowledge in selecting genomewide findings for follow-up.** *Genet Epidemiol.* **2013** Feb;37(2):205-13
24. Thompson JR, Gögele M, Weichenberger CX, Modenese M, Attia J, Barrett JH, Boehnke M, De Grandi A, Domingues FS, Hicks AA, Marroni F, Pattaro C, Ruggeri F, Borsani G, Casari G, Parmigiani G, Pastore A, Pfeufer A, Schwienbacher C, Taliun D, Consortium C, Fox CS, Pramstaller PP, Minelli C. **SNP prioritization using a bayesian probability of association.** *Genet Epidemiol.* **2013** Feb;37(2):214-21
25. Dastani Z, *et al.* **Novel loci for adiponectin levels and their influence on type 2 diabetes and metabolic traits: a multi-ethnic meta-analysis of 45,891 individuals.** *PLoS Genet.* **2012**;8(3):e1002607.
26. Schiavi F, Demattè S, Cecchini ME, Taschin E, Bobisse S, Del Piano A, Donner D, Barbareschi M, Manera V, Zovato S, Erlic Z, Savvoukidis T, Barollo S, Grego F, Trabalzini F, Amistà P, Grandi C, Branz F, Marroni F, Neumann HP, Opocher G. **The endemic paraganglioma syndrome type 1: origin, spread, and clinical expression.** *J Clin Endocrinol Metab.* **2012** Apr;97(4):E637-41.
27. Marroni F, Pinosio S, Di Centa E, Jurman I, Boerjan W, Felice N, Cattonaro F, Morgante M. **Large-scale detection of rare variants via pooled multiplexed next-generation sequencing: towards next-generation Ecotilling.** *Plant J.* **2011** Aug;67(4):736-45.
28. Chambers JC, *et al.* **Genome-wide association study identifies loci influencing concentrations of liver enzymes in plasma.** *Nat Genet.* **2011** Oct 16;43(11):1131-8.
29. Marroni F, Pinosio S, Zaina G, Fogolari F, Felice N, Cattonaro F, Morgante M. **Nucleotide diversity and linkage disequilibrium in *Populus***

- nigra cinnamyl alcohol dehydrogenase (CAD4) gene.** *Tree Genetics and Genomes*, 2011, 7(5): 1011-23.
30. Pastrello C, Pin E, Marroni F, Bedin C, Fornasari M, Tibiletti MG, Oliani C, de Leon MP, Urso ED, Puppa LD, Agostini M, Viel A. **Integrated analysis of unclassified variants in mismatch repair genes.** *Genet Med*, 2011 Jan 13. Feb;13(2):115-24.
 31. Pichler I, et al. **Identification of a common variant in the TFR2 gene implicated in the physiological regulation of serum iron levels.** *Hum Mol Genet*, 2011 Mar 15;20(6):1232-40.
 32. Teslovich TM et al. **Biological, clinical and population relevance of 95 loci for blood lipids.** *Nature*, 2010 Aug 5;466(7307):707-13.
 33. Eijgelsheim M, et al. **Genome-wide association analysis identifies multiple loci related to resting heart rate.** *Hum Mol Genet*, 2010 Oct 1;19(19):3885-94. Epub 2010 Jul 16.
 34. Pichler I, Fuchsberger C, Platzer C, Caliskan M, Marroni F, Pramstaller PP, Ober C. **Drawing the history of the Hutterite population on a genetic landscape: inference from Y-chromosome and mtDNA genotypes.** *Eur J Hum Genet*. 2010 18(4):463-70.
 35. Wang W, Niendorf KB, Patel D, Blackford A, Marroni F, Sober AJ, Parmigiani G, Tsao H. **Estimating CDKN2A carrier probability and personalizing cancer risk assessments in hereditary melanoma using MelaPRO.** *Cancer Res*, 2010 Jan 15;70(2):552-9.
 36. Pichler I, Marroni F, Pattaro C, Lohmann K, de Grandi A, Klein C, Hicks AA, Pramstaller PP. **Parkin gene modifies the effect of RLS4 on the age at onset of restless legs syndrome (RLS).** *Am J Med Genet B Neuropsychiatr Genet*, 2010: Jan 5;153B(1):350-5.
 37. Hicks AA et al. **Genetic determinants of circulating sphingolipid concentrations in European populations.** *PLoS Genet*. 2009 Oct;5(10):e1000672.
 38. De Grandi A, Volpato CB, Bedin E, Pattaro C, Marroni F, Pichler I, Hicks AA, Casari G, Pramstaller PP. **ParkScreen: a low-cost rapid linkage marker panel for Parkinson's disease.** *J Mol Neurosci*. 2009 Sep;39(1-2):235-41.
 39. Marroni F, Pfeufer A, Aulchenko YS, Franklin CS, Isaacs A, Pichler I, Wild SH, Oostra BA, Wright AF, Campbell H, Witteman JC, Kääh S, Hicks AA, Gyllensten U, Rudan I, Meitinger T, Pattaro C, van Duijn CM, Wilson JF, Pramstaller PP, on behalf of the EUROSPAN Consortium. **A Genome-Wide Association Scan of RR and QT Interval Duration in 3 European Genetically Isolated Populations: The EUROSPAN Project.** *Circ Cardiovasc Genet*, 2009 Aug; 2: 322 - 328.
 40. Pattaro C, Aulchenko YS, Isaacs A, Vitart V, Hayward C, Franklin CS, Polasek O, Kolcic I, Biloglav Z, Campbell S, Hastie N, Lauc G, Meitinger T, Oostra BA, Gyllensten U, Wilson JF, Pichler I, Hicks AA, Campbell H, Wright AF, Rudan I, van Duijn CM, Riegler P, Marroni F, Pramstaller PP; EUROSPAN Consortium. **Genome-wide linkage analysis of serum creatinine in three isolated European populations.** *Kidney Int*. 2009 Aug;76(3):297-306.
 41. Pfeufer A, et al. **Common variants at ten loci modulate the QT interval duration in the QTSCD Study.** *Nat Genet*. 2009 Apr;41(4):407-14.
 42. Johansson A, Marroni F, Hayward C, Franklin CS, Kirichenko AV, Jonasson I, Hicks AA, Vitart V, Isaacs A, Axenovich T, Campbell S, Floyd J, Hastie N, Knott S, Lauc G, Pichler I, Rotim K, Wild SH, Zorkoltseva IV, Wilson JF, Rudan I, Campbell H, Pattaro C, Pramstaller P, Oostra BA, Wright AF, van Duijn CM, Aulchenko YS, Gyllensten U; for the EUROSPAN Consortium. **Linkage and Genome-wide Association Analysis of Obesity-related Phenotypes: Association of Weight With the MGAT1 Gene.** *Obesity (Silver Spring)*. 2010 Apr;18(4):803-8.
 43. Johansson A, Marroni F, Hayward C, Franklin CS, Kirichenko AV, Jonasson I, Hicks AA, Vitart V, Isaacs A, Axenovich T, Campbell S, Dunlop MG, Floyd J, Hastie N, Hofman A, Knott S, Kolcic I, Pichler I, Polasek O, Rivadeneira F, Tenesa A, Uitterlinden AG, Wild SH, Zorkoltseva IV, Meitinger T, Wilson JF, Rudan I, Campbell H, Pattaro C, Pramstaller P, Oostra BA, Wright AF, van Duijn CM, Aulchenko YS, Gyllensten U; EUROSPAN Consortium.: **Common variants in the JAZF1 gene associated with height identified by linkage and genome-wide association analysis.** *Hum Mol Genet*. 2009 Jan

- 15;18(2):373-80.
44. Aulchenko YS, *et al.* **Loci influencing lipid levels and coronary heart disease risk in 16 European population cohorts.** *Nat Genet.* **2009** Jan;41(1):47-55.
 45. Riegler A, Marroni F, Pattaro C, Gueresi P, Pramstaller PP. **Isolation and marriage patterns in four South Tyrolean villages (Italy) during the nineteenth century.** *J Biosoc Sci.* **2008** Sep;40(5):787-91.
 46. Marroni F, Cipollini G, Peissel B, D'Andrea E, Pensabene M, Radice P, Caligo M.A, Presciuttini S, Bevilacqua G: **Reconstructing the genealogy of a BRCA1 founder mutation by phylogenetic analysis.** *Annals of Human Genetics* **2008**; 72(Pt 3):310-8.
 47. Marroni F, Grazio D, Pattaro C, Devoto M, Pramstaller P. **Estimates of Genetic and Environmental Contribution to 43 Quantitative Traits Support Sharing of a Homogeneous Environment in an Isolated Population from South Tyrol, Italy.** *Hum Hered.* **2008**;65(3):175-182.
 48. Pattaro C, Marroni F, Riegler A, Mascalconi D, Pichler I, Volpato CB, Dal Cero U, De Grandi A, Egger C, Eisendle A, Fuchsberger C, Gogele M, Pedrotti S, Pinggera GK, Stefanov SA, Vogl FD, Wiedermann CJ, Meitinger T, Pramstaller PP: **The genetic study of three population microisolates in South Tyrol (MICROS): study design and epidemiological perspectives.** *BMC Med Genet.* **2007** Jun 5;8(1):29.
 49. Marroni F, Pichler I, De Grandi A, Beu Volpato C, Vogl FD, Pinggera GK, Bailey-Wilson JE and Pramstaller PP: **Population isolates in South Tyrol and their value for genetic dissection of complex diseases.** *Annals of Human Genetics* **2006** 70 (6), 812-821.
 50. Pichler I, Marroni F, Beu Volpato C, Gusella JF, Kleine C, Casari G, De Grandi A, Pramstaller PP: **Linkage Analysis Identifies a Novel Locus for Restless Legs Syndrome on Chromosome 2q in a South Tyrolean Population Isolate.** *American Journal of Human Genetics* **2006** 79(4):716-23.
 51. Marroni F, Pastrello C, Benatti P, Torrini M, Barana D, Lucci Cordisco D, Viel A, Mareni C, Oliani C, Genuardi M, Bailey-Wilson JE, Ponz De Leon M, Presciuttini S: **A genetic model for determining MSH2 and MLH1 carrier probabilities based on family history and tumor microsatellite instability.** *Clinical Genetics* **2006** 69(3):254-62.
 52. Ciampolini R, Cetica V, Ciani E, Mazzanti E, Fosella X, Marroni F, Biagetti M, Sebastiani C, Papa P, Filippini G, Cianci D, Presciuttini S: **Statistical analysis of individual assignment tests among four cattle breeds using fifteen STR loci** *J. Anim Sci.* **2006** 84: 11-19.
 53. Marangoni R, Marroni F, Gioffre D, Ghetti F, Colombetti G: **Biological Weighting Function of the UV-B induced impairment of phototaxis in the fresh water ciliate Ophryoglena flava.** *Photochemistry and Photobiology* **2004**; 80(3):408-11.
 54. Marroni F, Aretini P, D Andrea E, Caligo MA, Cortesi L, Viel A, Ricevuto E, Montagna M, Cipollini G, Federico M, Santarosa M, Marchetti P, Bailey-Wilson JE, Bevilacqua G, Parmigiani G and Presciuttini S: **Penetrances of breast and ovarian cancer in a large series of families tested for BRCA1/2 mutations.** *European Journal of Human Genetics* **2004**;12(11):899-906.
 55. Marroni F, Curcio M, Fornaciari S, Lapi S, Mariotti ML, Scatena F, Presciuttini S: **Micro-geographic variation of HLA A, B and DR haplotype frequencies in Tuscany (Italy): implications for recruitment of bone marrow donors.** *Tissue antigens* **2004**; 64(4): 478-85.
 56. Marroni F, *et al.*: **Evaluation of widely used models for predicting BRCA1 and BRCA2 mutations.** *Journal of Medical Genetics* **2004**;41(4):278-85.
 57. Aretini P, *et al.*: **Different Expressivity of BRCA1 and BRCA2: Analysis of 179 Italian Pedigrees with Identified Mutation.** *Breast Cancer Research and Treatment* **2003**, 81: 71-79.
 58. Cadetti L., Marroni F., Marangoni R., Kuhlmann H.-W., Gioffre D., Colombetti G.: **Phototaxis in the ciliated protozoan Ophryoglena flava: dose-effect curves and action spectrum determination.** *J. Photochem. Photobiol. B: Biol.* **57(2000)**, 41-50.

Review papers	<p>59. Marroni F, Pinosio S, Morgante M. Structural variation and genome complexity: is dispensable really dispensable? <i>Curr Opin Plant Biol.</i> 18 (2014), 31-36.</p> <p>60. Marroni F, Pinosio S, Morgante M. The Quest for Rare Variants: Pooled Multiplexed Next Generation Sequencing in Plants. <i>Front Plant Sci.</i> 2012;3:133. Epub 2012 Jun 28.</p>
Peer-reviewed conference proceedings	<p>Marroni F, Toni C, Pennato B, Tsai YY, Duggal P, Bailey-Wilson JE, Presciuttini S: Haplotypic Structure of the X-Chromosome in the COGA Population Sample and the Quality of its Reconstruction by Extant Software Packages. <i>BMC Genetics</i> 2005, 6 (Suppl 1):S77.</p> <p>Fosella X, Marroni F, Manzoni S, Verzeletti A, De Ferrari F, Cerri N, Presciuttini S: Assigning individuals to ethnic groups based on 13 STR loci. <i>Proceedings of the 20th International ISFG Congress, Arcachon, France, 9-13 September 2003, International Congress Series 1261 (2004)</i> 59-61.</p> <p>Presciuttini S, Toni C, Marroni F, Spinetti I, Bailey-Wilson JE, Domenici R: The number of STR markers necessary to resolve relationships in deficiency paternity cases. <i>Proceedings of the 20th International ISFG Congress, Arcachon, France, 9-13 September 2003, International Congress Series 1261 (2004)</i> 541-543.</p>
Visiting Scientist	<p>October 2004: Johns Hopkins University, Department of Biostatistics, Baltimore, MD, USA (prof. Giovanni Parmigiani)</p> <p>June 2006: Medical Research Council, Human Genetics Unit, Western General Hospital, Edinburgh, Scotland, UK (Dr. Veronique Vitart)</p> <p>19th August - 8th September 2014: INTA, Hurlingham, Buenos Aires, Argentina. Visiting researcher in the framework of the project DEANN (Grant Agreement number: PIRSES-GA-2013-612583). Reference: Norma Paniago</p> <p>17th August - 7th September 2015: Langebio/CINVESTAV, Irapuato Mexico. Visiting researcher in the framework of the project DEANN (Grant Agreement number: PIRSES-GA-2013-612583). Reference: Rafael Montiel</p> <p>15th August - 23th September 2016: University of Florida, Gainesville, FL, USA. Visiting researcher in the framework of the project DEANN (Grant Agreement number: PIRSES-GA-2013-612583). Reference: Lauren McIntyre</p> <p>21st August - 28th September 2017: University of Florida, Gainesville, FL, USA. Visiting researcher in the framework of the project DEANN (Grant Agreement number: PIRSES-GA-2013-612583). Reference: Matias Kirst</p> <p>19th November 2019 - 2nd February 2020: CSIRO St Lucia, Brisbane (Australia). Visiting researcher in the framework of the GenSal project. Reference: James Kijas</p>
Participation to Research Projects	<p>2005-2008 EUROSPAN: EUROpean special populations research Network: quantifying and harnessing genetic variation for gene discovery (FP6, Grant Number LSHG-CT-2006-018947)</p> <p>2008-2012 ENERGYPOPLAR: Enhancing Poplar Traits for Energy Applications (FP7, grant 211917)</p> <p>2012-2017 NOVABREED: Novel variation in plant breeding and the plant pan-genomes (ERC 294780)</p> <p>2014-2017 DEANN: Developing an European American NGS Network (PIRSSES-GA-2013-612583)</p> <p>2019-2020 GenSal: Genomic analysis of brown trout (<i>Salmo trutta</i>), financed by University of Udine.</p>
Workshops/ Conferences Organization	<p>2018 Scientific co-director of the bioinformatics courses “Data Crunching: from hell to heaven” (Udine, 25th-27th July 2018) and “Epigenetics: on the top of Genetics” (Udine, September 4th-7th).</p> <p>Scientific co-director of the ECM course: “Next Generation Diagnostics: la diagnostica ai tempi del sequenziamento di nuova generazione” held in Udine, June 22nd 2018.</p> <p>2016 Member of the organising committee of the bioinformatics course: “Bioinformatica</p>

	per tutto, bioinformatica per tutti” on behalf of the Società Italiana di Genetica Agraria (Italian Society of Agriculture Genetics), and teacher in the same course, held in Udine 28 th June - 1 st July 2016
2015	In the framework of the EU-funded DEANN project, member of the organizing committee of the NGS Workshop “On top of genetics” 22-23 June, Udine, Italy (http://bioinfo.cipf.es/deann/?tribe_events=epigen-ngs-workshop)
Talks/Lectures	
2018	BITS, meeting of the Italian Bioinformatics Society, June 27 th – 29 th Turin, Italy.
2014	GRAcious symposium on grape genetics, genomics and physiology (Sde Boqer, Israel, October 29-31, 2014) Bioinformatiha 3 (Pisa, October 20, 2014) Genomics meets metabolomics (IGA, Udine, Italy, 05/10/2014) Scuola Superiore Sant'Anna, Pisa (05/03/2014)
2013	IGA Technology services (Watbio) Università di Udine (Study day on Big Data)
2012	METLA, Helsinki (Noveltree) IGA Technology services (Course, Data Crunching: from hell to heaven)
Editor/Reviewer	Editor for: Scientific Data, Frontiers in Plants Science (Technical Advances). Reviewer for: BMC Genetics, BMC genomics, Journal of Genetics, PLoS One, Molecular Ecology, European Journal of Human Genetics, Human Mutation, Journal of Medical Genetics, Tree Genetics and Genomes, Journal of the American Society for Horticultural Science, Clinical Genetics, Human Molecular Genetics, Human Biology, Journal of Experimental Botany, Molecular Biology Reports, Plant Science, Plant Genetic Resources, Scientific Reports Member of the Program Committee of ISBM 2018.
Grant Reviewer	European Commission, Czech Science Foundation, National Research Foundation of South Africa, Regione Autonoma Sardegna
Awards	New Phytologist Trust travel grant: 26 th New Phytologist Symposium “Bioenergy trees”. Recipient of the “Finanziamento delle attività base di ricerca” grant/award (3000 Euros)
Popular science	Marroni F: La misura dell’isolamento . Academia N.42 (EURAC’s quarterly science magazine), December 2006. Marroni F: Viaggi genetici? No grazie . Academia N.45 (EURAC’s quarterly science magazine), December 2007.
Professional Skills	Experience with statistical methods for linkage and association mapping of quantitative and qualitative traits. Experience in population genetics: population differentiation, LD structure, mutation dating, haplotype inference, phylogeny. Experience in statistical and bioinformatics analysis of Next Generation Sequencing data
Laboratory Skills	Electrophoresis, DNA/RNA extraction, PCR, Sanger sequencing, library preparation for next generation sequencing.
Programming Skills	R, shell scripting.
Research Interests	Applications of Next Generation Sequencing Study of gene expression using RNAseq Genome Wide Association Mapping, QTL mapping, eQTL mapping Metagenomics Identification of structural variants Genomics Population genetics Linkage and association mapping of quantitative and qualitative traits Genetic Epidemiology
Interests and hobbies	Actor in several non-professional acting companies. Writer of several short stories and poems (in Italian). Founding member of Kaleidoscienza, a not for profit association for the advancement and public understanding of science.

Fabio Marroni