

PERSONAL INFORMATION

Mickael Malnoy



📍 Via Biasi 74/E/6, 38010 San Michele all Adige (TN). Italy

☎ +39 0461 61 55 36 📠 +39 3929 98 22 71

✉ Mickael.malnoy@fmach.it

🌐 <http://www.fmach.it/CRI/info-general/organizzazione/Direzione/Genomica-e-Biologia-Piante-da-Frutto/C.R.I.-DIP.-GENOMICA-UNITA-GENOMICA-E-BIOLOGIA-AVANZATA>

Sex M | Date of birth 11/07/1972 | Nationality French

WORK EXPERIENCE

- February 2016- present **Head of the Genomic and Advanced Biotechnology Unit**
Fondazione Edmunt Mach (FEM), Istituto Agrario di San Michele All'Adige (IASMA) Trento, Italy
- September 2007 – January 2016 **Group leader of plant biotechnology lab:** Fondazione Edmunt Mach (FEM), Istituto Agrario di San Michele All'Adige (IASMA) Trento, Italy
- January 2005- August 2007 **Research Associate :** Cornell University, department of plant pathology, Geneva, NY14456, USA. Supervision Pr Aldwinckle H.
- January 2002- December 2004 **Research Associate :** Cornell University, department of plant pathology, Geneva, NY14456, USA. Supervision Pr Aldwinckle H.
- September 1998-October 2001 **Ph.D** in cellular and molecular biology, from the University of Angers (France), under the supervision of Dr Chevreau E. (INRA Angers).

EDUCATION AND TRAINING

- October 2011 *PhD (Doctor rerum naturalium)of Biology cellular and Molecular INRA and Angers university, Fr*
- September 1997 *MSc, Master in Science of plant cellular and molecular biology Toulouse University,Fr*
- June 1995 *BSc, Bachelor in science in plant biology and physiology Tours university Fr*
- June1992 *DUT, Diploma university technology in plant agronomy Angers University, Fr*

PERSONAL SKILLS

Mother tongue(s) French

Other language(s)

	UNDERSTANDING		SPEAKING		WRITING
	Listening	Reading	Spoken interaction	Spoken production	
English	C1	C1	C1	C1	C1
Italian	B1	B1	B1	B1	B1

Levels: A1/A2: Basic user - B1/B2: Independent user - C1/C2 Proficient user

Communication skills ■ I am in possession of excellent communication and presentation skills gained throughout my career

Organisational / managerial skills I acquired strong team-leading skills during career experience

- Training and supervising master student, PhD and post Doctoral
- Responsible and coordination of PhD, technician, technologist, post Doc.

ADDITIONAL INFORMATION

Publications

Emeriewen F, Richter K, Kilian A, Zini E, Hanke MV, Malnoy M, Peil A. (2014). Identification of a major QTL for resistance to fire blight in the apple wild species *Malus fusca*. *Molecular breeding*, 34, 407–419.

Fischer T. C., Malnoy M., Hofmann T., Schwab W., Palmieri L., Wehrens R., Schuch L.A., Muller M., Schimmelpfeng H., Velasco R., Marten S., 2014 F₁ hybrid of cultivated apple (*Malus x domestica*) and European pear (*Pyrus communis*) with fertile F₂ offspring. *Molecular breeding* 34, 817-828 DOI 10.1007/s11032-014-0077-4.

Mohanta T , Malnoy M, Mohanta N, Nagamangala Kanchiswamy C, 2014. In-silico identification and phylogenetic analysis of auxin efflux carrier gene family in *Setaria italica* L. *African Journal of Biotechnology*. Vol13(2) 211-225.

Kanchiswamy C, Malnoy M., Occhipinti A., and Maffei M.E., 2014. Calcium Imaging Perspectives in Plants. *Int. J. Mol. Sci.* 2014, 15, 3842-3859; doi:10.3390/ijms15033842.

Peil A, Emeriewen F, Richter K, Wöhner T, Malnoy M, Hanke M, Flachowsky H. 2014. Comparative genetic mapping of resistance to fire blight in *Malus* sp. *JOURNAL FÜR KULTURPFLANZEN*, 66 (12). S. 409–416.

Pessina S, Pavan S, Catalano D, Gallotta A, Visser RGF, Bai Y, Malnoy M, Schouten H, 2014. Characterization of the MLO gene family in Rosaceae and gene expression analysis in *Malus domestica*. *BMC genomics*. 2014 Jul 22;15(1):618.

Perazzolli M, Malacarne G, Baldo A, Righetti L, Bailey A, Fontana P, Velasco R, Malnoy M, 2014 Characterization of *NBS* resistance genes analogues (RGAs) in apple (*Malus x domestica* Borkh.) and the evolutionary history of the Rosaceae family. *Plos one* February 2014 | Volume 9 | Issue 2 | e83844.

Pessina S, Magel D, Macera F, Masegón B, Malacarne G, Velasco R, Schouten H, Maffei ME (2013) The unknown of the expression of MLO in apple: susceptibility to powdery mildew and fungal pathogens. *PLoS ONE* 8(12): e75027. doi:10.1371/journal.pone.0075027

Kanchiswamy C, Malnoy M, Maffei ME (2015) Microbial volatiles for plant defense: the role of plant defense signaling. *PLoS ONE* 10(12): e0142111. doi:10.1371/journal.pone.0142111

Monatari S, Percepied L, Benatti F, Fontana P, Velasco R, Velasco R, Sargent DJ, Chagne D, Bus Kanchiswamy C, Malnoy M, Maffei ME (2015) L. Bacterial and fungal pathogens: population structure and genetic backgrounds. *Molecular breeding* 35:16. doi:10.1007/s11032-015-0021-1

Kanchiswamy C, Sargent DJ, Velasco R, Maffei ME., Malnoy M. 2015. Looking forward: genome editing in apple. *PLoS ONE* 10(12): e0142111. doi:10.1371/journal.pone.0142111

Dalla Costa L, Pessina S, Campa M, Poletti V, Martinelli L, Malnoy M, 2014. Efficient heat-shock removal of the selectable marker genes in genetically modified grapevine plants. *Plant Cell Tissue and Organ Culture* 124(3): 471-481

Sahni S, Piazza S, Maffei ME, Fierla S, Furlan S, Velasco R, Malnoy M. 2015. High frequency of chromosomal deletions in regenerated and mutagenized apple (*Malus x domestica*) seedlings. *Molecular Breeding*, 35:4

Monatari S, Velasco R, Malnoy M, Percepied L, Guerif P, Durel C.E, Bus VGM, gardiner SE, Chagne D, (2016). Genome mapping of post zygote necrosis in an interspecific pear population. *PLoS ONE* 11(6): e0156474. doi:10.1371/journal.pone.0156474

Rubio J, Montes C, Castro A, Catalina A, Olmedo B, Munoz M, Tapia E, Reyes F, Ortega M, Ernst M, Sanchez E, Campa M, Dalla Costa L, Martinelli L, Malnoy M, Prieto H. 2015. Genetically engineered homozygous seedless grapevine plants designed for fungal tolerance selection and characterization of the best performing individuals in a field trial. *Transgenic research*. 24:43-60

Cova V, Easser Zuber P, Piazza S, Cestaro A, Velasco R, Malnoy M. (2015) High resolution and physical map of the Rv1 (vg) apple scab resistance locus. *Molecular Breeding*. 35:16.

Zhong Y , Yin H, Daniel James Sargent D.J, Malnoy M, Cheng M (2015). Species-specific duplication driving the recent expansion of NBS-LRR genes in five Rosaceae species. *BMC genomics* 16 :77. DOI 10.1186/s12864-015-1291-0.

Chagne D., Crowhurst R.N., Pindo M., Thrimawithana A., Deng C., Ireland H., Fiers M., Dzierzon H., Cestaro A., Fontana P., Bianco L., Lu A., Storey R., Knaebel M., Saeed M., Montanari S., Kyeong Kim Y., Nicolini D., Larger S., Stefani E., Allan A.C., Bowen J., Harvey I., Johnston J., Malnoy M., Troglio M., Percepied L., Sawyer G., Wiedow C., Won K., Viola R., Hellens R.P., Brewer L., Bus V.G.M., Schaffer R.J., Gardiner S.E., Velasco R. 2014. The Draft Genome Sequence of European Pear (*Pyrus communis* L. ‘Bartlett’). *Plos one* April 2014 / volume 9/ issue 4 / e92644.

Dalla Costa L, Pinto-Sintra AL, Campa M, Poletti V, Martinelli L, Malnoy M 2014. Development of analytical tools for evaluating the effect of T-DNA chimeric integration on transgene expression in vegetatively propagated plants. *Plant cell report*. 118:471-484.

- Caputi L, Nepogodiev S.A, Malnoy M, Rejzek M, Field R.F, Benini S, 2013 EaLsc, the levansucrase from *Erwinia amylovora*, is a promising biocatalyst for the synthesis of fructans. *Journal of Agricultural and food chemistry*. 61, 12265–12273.
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- Nagamangala Kanchiswamy C, Kumar Mohanta T, Capuzzo A, Occhipinti A, Verrillo F, Maffei M, Malnoy M, 2013. Role of Ca²⁺ and CDPKs in resistant and susceptible cultivars of apple (*Malus x domestica*) in response to the pathogen *Erwinia amylovora* and mechanical wounding. *BMC genomics*.
- Caputi L., Malnoy M., Goremyki V., Nikiforova S., Martens S. 2012. A genome-wide phylogenetic reconstruction of Family 1 UDP-glycosyltransferases revealed the expansion of the family during the adaptation of plants to life on land. *Plant Journal* 69: 1030-1042,
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- Malnoy M., Martens S., Norelli JL., Barny M.A, Sundin G, Smits THM, Duffy B., 2012. Fire Blight: Applied genomic insights of the pathogen and host. *Annu Rev Phytopathol*. 2012 Sep 8;50:475-94.
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- Baldo A., Norelli J.L., Farrell Jr. R.E., Bassett C.L., Aldwinckle H.S., Malnoy M. 2010, Identification of genes differentially expressed during interaction of resistant and susceptible apple cultivars (*Malus x domestica*) with *Erwinia amylovora*. *BMC plant biology*, 4;10:1.
- Borejsza-Wysocka E., Norelli J.L., and Aldwinckle H.S., Malnoy M. 2010. Long-term stability of *attacin E* expression in transformed apple after 12 years in the field and effect of the expression of this gene in the fruit characteristics. *BMC biotechnology* 10:41
- Malnoy M., Borejsza-Wysocka E.E., Norelli J.L., Flaishman M., Gidoni D., Flaishman M., Aldwinckle H.S., 2010. A novel principle for selection of transgenic apple (*Malus X domestica*) without use of selectable marker. *Tree Genetics and Genomes*. 6:423–433
- Tränkner C., Lehmann S., Hönicka H., Hanke M.-V., Fladung M., Lenhardt D., Dunemann F., Gau A., Schlangen K., Malnoy M., H. Flachowsky, (2010) a FT-homologous gene of apple induces early flowering in annual and perennial plants. *Planta* 232:1309–1324 DOI 10.1007/s00425-010-1254-2
- Velasco R., Zharkikh A., Affourtit J., Dhingra A., Cestaro A., Kalyanaraman A., Fontana P., Bhatnagar S.K., Troggio M., Pruss D., Salvi S., Pindo M., Baldi P., Castelletti S., Cavaiuolo M., Coppola G., Costa F., Cova V., Dal Ri A., Goremykin V., Komjanc M., Longhi S., Magnago P., Malacarne G., Malnoy M., Micheletti D., Moretto M., Perazzolli M., Si-Ammour A., Vezzulli S., Zini E., Eldredge G., Fitzgerald L.M., Gutin N., Lanchbury J., Macalma T., Mitchell J.T., Reid J., Wardell B., Chen Z., Desany B., Niazi F., Palmer M., Koepke T., Jiwan D., Schaeffer S., Krishnan V., Wu C., Chu V., King S., Vick J., Tao Q., Mraz A., Stormo A., Stormo K., Bogden R., Ederle D., Stella A., Vecchietti A., Kater M.M., Masiero S., Lasserre P., Lespinasse Y., Allan A., Bus V., Chagné D., Crowhurst R., Gleave A., Lavezzo E., Fawcett J., Proost S., Rouzé P., Sterck L., Toppo S., Lazzari B., Hellens R., Durel C.E., Gutin A., Bumgarner R., Gardiner S., Skolnick M., Egholm M., Van de Peer Y., Salamini F., Viola R., 2010 The genome emergence of the domesticated apple (*Malus x domestica* Borkh.). *Nature Genetics*. 42:833-841. Online doi:10.1038/ng.654
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- Bulley S.M., Malnoy M., Atkinson R.G., and Aldwinckle H.S., 2007. Transformed apples: traits of significance to growers and consumers. . In: Nageswara-Rao M, Soneji JR (Eds) *Transgenic Plant Journal* 1(2) 267-279.
- Malnoy M., Jin Q., Borejsza-Wysocka E.E., He S.Y., Aldwinckle H.S., 2007 Over-Expression of the Apple Gene MpNPR1 Causes Increased Disease Resistance in *Malus X domestica*. *Mol. Plant-Microbe Interact.* 20:1568-1580
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- Malnoy M., Reynoird J.P., Borejsza-Wysocka E.E., Aldwinckle H.S., 2006. Activation of the pathogen-inducible *Gst1* promoter of potato after elicitation by *Venturia inaequalis* and *Erwinia amylovora* in transgenic apple (*Malus X domestica*). *Transgenic research.* 15:83-93.
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- Malnoy M., Venisse J.S., Chevreau E., 2005. Expression of a Bacterial Effector, Harpin N_{Ea}, Causes Increased Resistance to fire blight in *Pyrus communis*. *Tree Genetics and Genomes.* 1:41-49.
- Malnoy M., Venisse J.S., Faize M., Geider K., Chevreau E., 2005; Expression of viral EPS-depolymearse reduces fire blight susceptibility in transgenic pear. *Plant Cell Report* 23:632-638.
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- Malnoy M., Venisse J.S., Reynoird J.P., Chevreau E., 2003. Activation of three pathogen-inducible promoters of tabacco in transgenic pear after abiotic and biotic elicitation. *Planta* 216:802-814.
- Malnoy M., Venisse J.S., Brisset M.N., Chevreau E., 2003. Expression of bovin lactoferrin cDNA confers resistance to *Erwinia amylovora* in transgenic pear through iron chelation. *Molecular Breeding* 12:231-244.
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Memberships ■ Molecular Plant Microbe Interaction (MPMI), and International Society of Horticultural Science (ISHS).