

Europass Curriculum Vitae



Personal information

First name / Surname **Silvia Vezzulli**

Address [Redacted] (N), Italy

Mobile [Redacted]

E-mail [Redacted]

Nationality [Redacted]

Date of birth [Redacted]

Place of birth [Redacted]

Gender [Redacted]

Education and training

Dates November 2001 - November 2004
awarded on 3 March 2005

Title of qualification awarded **Ph.D. in Molecular Biotechnologies**

Principal subjects/occupational skills covered Study of genetic factors responsible for stilbene production in grapevine roots, leaves, and berries

Name and type of organisation providing education and training Università Cattolica del Sacro Cuore (UCSC), Piacenza (Italy)

Dates October 1996 - October 2001
awarded on 17 October 2001

Title of qualification awarded **Degree in Agricultural Sciences** (equivalent to MSc)

Principal subjects/occupational skills covered Molecular investigations to identify genes for vernalization requirement in *Hordeum vulgare* L. e *Triticum monococcum* L. (grade 110/110 first class honours)

Name and type of organisation providing education and training Università Cattolica del Sacro Cuore (UCSC), Piacenza (Italy).

Level in national or international classification	Dottore in Scienze e Tecnologie Agrarie
Dates	September 1991 - July 1996
Title of qualification awarded	High school diploma (Liceo Classico)
Principal subjects/occupational skills covered	Ancient literature, Chemistry and Biology (grade 56/60)
Name and type of organisation providing education and training	Liceo Classico Giuseppe Novello, Codogno - Lodi (Italy)

Scientific career

Apr 2005 – Nov 2010	Post-doctoral activities
1 Dec 2007 - 30 Nov 2010	Post-doctoral Fellowship within the FunFruit project (led by Dr. Claudio Moser) and the Structural and Functional Genomics program (led by Dr. Riccardo Velasco) at Research and Innovation Centre (CRI) of Edmund Mach Foundation (FEM). Responsible of the post-doc project S.A.M.P.LE. Vitis ("Sinergia di approcci molecolari per la caratterizzazione clonale in vite") funded by Autonomous Province of Trento. Overall activities: - Molecular characterization of grape clones - Study of the application of grape transposable elements - Identification of endovirus copies along the grape genome - Analysis of apple genome repeats - Set-up of the radioisotope lab
8 May 2006 - 30 Nov 2007	Post-doctoral research contract at Istituto Agrario San Michele all'Adige (IASMA), San Michele a/Adige, Trento (Italy). Supervisor: Dr. Riccardo Velasco, Department of Biology and Molecular Genetics. Research project entitled: "The grapevine genome sequencing: molecular marker development, genetic map construction and repeat analysis".
4 Jun 2007 - 24 Jun 2007 4 Jul 2007 - 29 Aug 2007	<u>Research experience</u> at Myriad Genetics, Salt Lake City (UT-USA). Supervisors: Dr. Andrey Zharkikh and Dr. Dmitry Pruss. Research project entitled: "Anchoring a high dense genetic map to the grapevine (Pinot Noir) genome sequence" and "Study of the repetitive elements distributed along the grapevine (Pinot Noir) genome". Training on the novel 454 Life Sciences (Roche Diagnostics) sequencing technology.
15 Jan 2006 - 7 May 2006	Post-doctoral research contract at INRA, Montpellier (France). Supervisors: Dr. Patrice This and Dr. Laurent Torregrosa, Equipe Génétique Vigne. Research project entitled: "First <i>linkage disequilibrium</i> (LD) in grapevine: association studies between polymorphisms and the berry size trait".
1 Apr 2005 - 31 Dec 2005	Post-doctoral research contract at IASMA, San Michele a/Adige, Trento (Italy). Supervisor: Dr. Riccardo Velasco, Department of Biology and Molecular Genetics. Research project entitled: "Development of a functional integrated linkage map among five elite cultivars of grapevine (<i>Vitis vinifera</i> L.)".

Jan 2002 – Dic 2004 Pre-doctoral activities

1 May 2004 - 31 Dec 2004	Pre-doctoral research contract at UCSC, Piacenza (Italy). Supervisors: Prof. Luigi Bavaresco and Prof. Mario Fregoni, Department of Pomology and Viticulture. Research project entitled: "Study of the effect of biotic (<i>Aspergillus spp.</i>) and abiotic (methyl-jasmonate and calcareous soil) stresses on stilbene synthesis at berry level".
5 Jul 2004 - 23 Jul 2004	<u>Pre-doctoral internship</u> at IASMA, San Michele a/Adige, Trento (Italy). Supervisor: Dr. M. Stella Grando, Department of Biology and Molecular Genetics. Research project entitled: "Molecular marker analysis of grapevine genotypes by capillary electrophoresis: varietal characterization and parentage study".
15 Jul 2003 - 15 Apr 2004	Pre-doctoral research contract at University of California, Davis (CA-USA). Supervisor: Prof. Andrew M. Walker, Department of Viticulture & Enology. Research projects entitled: "Study of the effect of biotic stresses on stilbene synthesis at leaf (<i>Oidium tuckeri</i>, fungus) and root (<i>Xiphinema index</i>, nematode) level" and "Resolving the heritage of grape breeding populations with resistance to Pierce's disease and Dagger nematode".
1 Jan 2002 - 30 Jun 2003	Pre-doctoral research contract at UCSC, Piacenza (Italy). Supervisors: Prof. Corrado Fogher, Department of Botany and Plant Genetics, and Prof. Luigi Bavaresco, Department of Pomology and Viticulture. Research project entitled: "Study of genetic factors responsible for stilbene production in grapevine roots, leaves, and berries".
1 Jul 2000 - 30 Sep 2001	<u>Undergraduate internship</u> at UCSC, Piacenza (Italy). Supervisor: Prof. Adriano Marocco, Department of Botany and Plant Genetics. Research project entitled: "Molecular inquires to identify genes for vernalization requirement in <i>Hordeum vulgare</i> L. e <i>Triticum monococcum</i> L."

Current position

Dates	1 December 2010 – present
Occupation or position held	Senior Researcher (FEM R3 level) 1 October 2019 - present Eligibility for the Group Leader position (FEM R2 level) in the field of Genetics and Breeding of Fruit Trees

Main activities and responsibilities

Current responsible for the Applied Genetics to Grapevine (GAV) section within the Grapevine Genetics and Breeding (GMGV) Unit, led by Marco Stefanini, of the Genomics and Biology of Fruit Plants dept. (DGBPF) at FEM-CRI.

Former (till 2015) officious responsible for the *Vitaceae* sector within the Structural Genomics group, led by Dr. Riccardo Velasco, of the DGBPF at FEM-CRI.

Main activities:

Genetic material collection

- recovery of several *Vitis* pure species and hybrids from European and American repositories and private nurseries
- wild collection in woods of new *Vitis* accessions

Genotyping

- Resistance loci characterization in a large panel of accessions
- Selection of 190 SSRs well-scattered and uniquely positioned across the reference genome
- Development of a low-cost multiplex SSR protocol
- Use of the available *Vitis*17KSNP chip (GrapeReSeq consortium)
- Identification of known or definition of unknown genotypes based on 9 reference SSRs at the international VIVC, Euvitis and GRIN databases
- Enrichment of VIVC (*Vitis* International Variety Catalogue) with new hybrid profiles
- Pedigree confirmation or inference based on 50 SSRs

Phenotyping

- Optimization of an *in vivo* phenotyping method to assess black rot resistance on potted plants
- Optimization of a high-throughput *in vitro* phenotyping method to assess downy mildew resistance on leaf disks
- Development of a mid-throughput *in vitro* phenotyping method to assess powdery mildew resistance on leaf disk
- Characterization of 100 (out of 264) *Vitis* accessions for downy and powdery mildew resistance
- Development of the first *in vitro** phenotyping method to assess downy mildew resistance on inflorescence/bunch
- Proposal of the OIV descriptor 453-1* (*currently under evaluation by the International Organization of Vine and Wine commission - OIV)

Genotype-Phenotype Association

- Marker-Assisted Selection for disease resistance (since February 2017)
- Development of genomic-assisted pre-breeding strategies to provide *V. vinifera* with disease (mid-)resistance:
 - a) set-up of the first Pedigree Based Analysis (PBA) in *Vitis* spp.
 - b) set-up of Marker Assisted Back-Cross (MABC) at FEM-CRI
- Identification of molecular markers/haplotypes associated to grapevine downy and powdery mildew resistance
- Study of the evolution of the berry colour locus in grape somatic variants by means of fine structural analysis

Type of business or sector	Main field: molecular breeding in Grapevine
	Related fields: genetics, phytopathology, structural genomics, molecular biology and botany (from species through varieties to clones)

Positions of responsibility and achievements

Reviewer	- <u>for journals with IF</u> AJEV, American Journal of Enology and Viticulture AJGWR, Australian Journal of Grape and Wine Research BMC Genomics BMC Plant Biology BMC Genetics Genetica J Exp Bot, Journal of Experimental Botany TAG, Theoretical and Applied Genetics TGG, Tree Genetics and Genomes MOBI, Molecular Biotechnology MOLB, Molecular Breeding PLoS ONE PMBR, Plant Molecular Biology Reporter - <u>for research grants</u> 3-year research project within BARD, United States - Israel Binational Agricultural Research and Development Fund
Editor	- Past (2013) <u>Associate Editor</u> of BMC Genomics - Current Guest Editor of Plants - Special Issue: "Genetic Material – Wild Species: from the Genotyping and the Phenotyping"
Member as Expert	- OIV (Organisation Internationale de la Vigne et du Vin) GENET Commission - IGGP (International Grapevine Genome Program) Steering Committee - CIVIT (Consortium Innovation in Viticulture) Technical Board

PI or co-I of
local, national and European
research projects

- 2020: Regione Lombardia Project – (FEM scientific reference) – **NO-BLACK** – funded (**20 k€**)
- 2017: CORE Organic EU Project (applicant co-I, WP leader, FEM scientific reference) - *not funded*
- 2015: CARIPLO Integrated research on industrial biotechnologies Project (applicant co-I, WP leader, FEM scientific reference) – **GrAptaResistance** - *funded (116 k€)*
- 2015: EUREGIO (Tirol, Sudtirolo, Trentino) Project (Consortium coordinator since September 1st 2017 / month 19th of 42) – **VITISANA** - *funded (75 k€)*
- 2013: EU FP7-PEOPLE-Career Integration Grant (PI of the applicant) - *finalist, but not funded*
- 2013: ERANET EU Project (applicant co-I, WP leader) - *finalist, but not funded*
- 2012: EU FP7-PEOPLE-Career Integration Grant (PI of the applicant) - *not funded*
- 2011: MIPAF Project (applicant co-I, FEM scientific reference) – **ESPLORA** - *funded (20 k€)*
- 2011: CARITRO post-Doc Project (PI of the applicant) - *not funded*
- 2008: Israel-Italy Join Innovation Program (applicant co-I) - *not funded*

Patent

Patent NoPv1 deposited on 11/12/2017 (IDEC/DEUM/P1395IT) "Peptidi ad attività fungicida, loro composizioni e relativi usi in campo agronomico". Innovative "green" molecules active against downy mildew of grapevine (and also of potato/tomato). Joint patent among FEM (50%), UniMI (49%) and Cariplo Foundation (1%). IP inventor S. Vezzulli: 12.5% of total.

Research awards and fellowships

3 Fellowships

- 2008 Short Term Scientific Mission fellowship to work on association studies in grape at INRA-Montpellier (France), funded by COST action 858 (1 month, **2 K€**)
- 2007 **S.A.M.P.LE. Vitis** post-doctoral fellowship to work on grape clonal characterization at FEM (Italy), funded by Autonomous Province of Trento (3 years, **150 K€**)
- 2002 Pre-doctoral fellowship to work on factors affecting stilbene synthesis at UCSC (Italy), funded by Romeo e Enrica Invernizzi Foundation (1 year, **20 K€**)

3 Awards

- 2018 The best scientific poster at XII International Conference on Grapevine Breeding and Genetics, Bordeaux (France)

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|--------|---|
| 2014 | The best scientific poster at Spatium Pinot blanc, Appiano-Eppan (BZ) (Italy) |
| [2013] | [The finalist for the SIVE International Award, funded by Società Italiana di Viticoltura ed Enologia, Arezzo (Italy)] |
| 1999 | The best student 1996-1998 of the Faculty of Agriculture, funded by Rotary Club Piacenza Farnese UCSC, Piacenza (Italy) |

Invited lecturers, seminars and collaborations

- | | |
|----------|--|
| 8 | Invited lectures |
| 2018 | "Genetic improvement for disease resistance in grapevine", Comité Européen des Entreprises Vins (CEEV), Bruxelles (Belgium). |
| 2018 | "The FEM grapevine breeding program for disease resistance", University of Innsbruck (Austria). |
| 2017 | "Innovative strategies towards marker-assisted (pre-)breeding for disease resistance in grapevine", Institute for Grapevine Breeding - JKI, Siebeldingen (Germany). |
| 2016 | "Innovative strategies towards marker-assisted (pre-)breeding for disease resistance in grapevine", University of Milan, Milano (Italy). |
| 2012 | "Structural dynamics at the berry colour locus in grape", INRA-Colmar, Colmar (France). |
| 2011 | "Successful wine grape varieties of the Trentino-Alto Adige and their potential for New Jersey", Outer Coastal Plain Vineyard Association 2 nd meeting, Pittstown (NJ-USA). |
| 2008 | "The genome sequence of the heterozygous Pinot Noir ENTAV 115", Workshop on grapevine genetics with special attention to the Balkans area, Tessaloniki (Greece). |
| 2007 | "SNPlex™ application scavenging the grapevine genome", 2nd European SNPlex User meeting, Barcelona (Spain). |

8 Seminars

- 2017-2018 "The FEM grapevine breeding program for disease resistance". Seminar to visiting university and high-school students, San Michele all'Adige (TN), Italy.
- 2017 "Facing the marker-assisted (pre-)breeding program in grapevine". DGBPF Seminar Series, San Michele all'Adige (TN), Italy.
- 2013 "Towards marker-assisted pre-breeding in grapevine". Laimburg Institute, Vadena (BZ), Italy.
- 2012 "Structural dynamics at the berry colour locus in grape". CRI Seminar Series, San Michele all'Adige (TN), Italy.
- 2012 "Genomics and Biology of Fruit Crops dept." FEM presentation to Chapeco delegation, San Michele all'Adige (TN), Italy.
- 2005 "Software for polymorphism identification and for genetic map development" at Advanced Course in Bioinformatics by SIGA (Società Italiana di Genetica Agraria), Salsomaggiore Terme, Parma, Italy.
- 2005 "Caratterizzazione varietale di *Vitis vinifera* cv. Scimiscià" at Meeting on Scimiscià cultivar, Assessorato all'Agricoltura della Provincia di Genova. Genova, Italy.

2 Technical days

- 2018 "Genetics of the main grapevine disease resistance". Two presentations in coll. with CIVIT to the PIWI viticulturist of Trentino and Alto-Adige, San Michele all'Adige (TN), Italy.

Research collaborations (past and current)

Within FEM

@ Research centre (CRI)

- Claudio Moser and Giulia Malacarne (Functional Genomics)
- Michele Perazzolli (Transcriptomics on Defense Response)
- Uska Vhrosek (Metabolomics)
- Luca Bianco (Computational Biology)

@ Extension service (CTT)

- Umberto Malossini (Grapevine Clonal Selection)
- Gino Angeli (Phytoiatry)
- Daniele Prodorutti (Diagnostics Assays)

National

- Rita Musetti, University of Udine, Udine, IT
- Simona Masiero and Paolo Pesaresi, University of Milan, Milano, IT
- Manna Crespan and Daniele Migliaro, CREA-VE, Conegliano (TV), IT
- Carlo Bergamini, CREA-VE, Turi (BA), IT
- Thomas Letschka and Elena Zini, Laimburg Institute, Vadena (BZ), IT
- Christian De Franceschi, LabWare Italia, Villafranca di Verona (VR), IT
- Dott. Gianluca Carenzo, HIT (Innovation Hub Trentino), Rovereto (TN), IT.

International

- Dario Cantù, M. Andrew Walker and Summaria Riaz, University of California, Davis, CA U.S.A.
- Bruce I. Reisch, Cornell University, Geneva, NY U.S.A.
- Andrey Zharkikh, Myriad Genetics, Salt Lake City, UT U.S.A.
- Ludger Hausmann, Institute for Grapevine Breeding, Siebeldingen, DEU
- Marco C.A.M. Bink and Eric van de Weg, PRI, Wageningen, NL
- Anne-Françoise Adam-Blondon, INRA, Evry, FR
- Patrice This and Laurent Torregrosa, INRA, Montpellier, FR
- Pierre-Yves Teysheney, CIRAD, Guadeloupe, FR
- Andrew Geering, University of Queensland, Brisbane, AU
- Mark Thomas, CSIRO Plant Industry, Adelaide, AU

Teaching and academic roles

2 Teaching qualifications

2012-2020 Associate Professor in "Crop Genetics": **07-E1** discipline by ASN-ANVUR (IT)

Associate Professor in "Horticultural Science": **07-B2** discipline by ASN-ANVUR (IT)

186 hours Academic lessons

2020 Lecturer of the module of "Molecular markers and Marker-Assisted Selection" (English - 12 hours) within the PhD AES course in Molecular Plant Breeding

2011-2012 "Genetics and genomics applied to the grapevine breeding" (Italian - 2 hours) at UCSC, Piacenza (Italy)

2004	"Viticulture" (English - 20 hours) for the European Master VINTAGE students at UCSC, Piacenza (Italy)
2003-2004-2005	"Genetic Biotechnologies: the Grapevine" (Italian - 2 hours) at UCSC, Piacenza (Italy)
2002-2003-2004	"Molecular Markers" (Italian - 2 hours) at UCSC, Piacenza (Italy)
2000	"Organic Chemistry" (Italian - 150 hours), tutorial for undergraduate students at UCSC, Piacenza (Italy)

23 Personnel supervision

- Post-doc Fellows e Researchers [n. 2]: E. Peressotti, post-doc expert in phenotyping for biotic stresses (2012-2015); M. Colombo, researcher (FEM R4 level) expert in cell and molecular biology (2016-2019);

- PhD students [n. 9: 3 as Official Supervisor]: P. Bettinelli PhD student from University of Udine (Italy), Faculty of Agriculture (2019-2022) – Official Supervisor; C. Pirrello, PhD student from University of Udine (Italy), Faculty of Agriculture (2018-2020) – Official co-Supervisor; T. Camponogara Tomazetti, visiting PhD student from Federal University of Santa Caterina (Brasil), Centre of Agricultural Sciences (2018-2019); D. Buonassisi, PhD student from University of Udine (Italy), Faculty of Agriculture (2014-2016) – Official Supervisor; V. Gratl, visiting PhD student from University of Innsbruck (Austria) (2017-2019); J. Muniz, visiting PhD student from Federal University of Santa Caterina (Brasil), Centre of Agricultural Sciences (2015-2016); L. Leonardelli, PhD student from University of Trento (Italy), Faculty of Industrial and Information Engineering (2010-2013); M.C. Dominguez Garcia, visiting PhD student from University of Cordoba (Spain), Centro Alameda del Obispo (2009); D. Degirmenci, visiting PhD student from University of Ankara (Turkey), Faculty of Agriculture (2005-2006);

- Master students [n. 3]: B. Tanzi, master student at University of Milan-Bicocca (Italy), Biology (2019-2020); L. Leonardelli, master student at University of Verona (Italy), Agro-Industrial Biotechnologies (2009-2010); D. Micheletti, master student at University of Padova (Italy), Genetic Biotechnologies (2006-2007);

- Bachelor students [n. 4]: T. Stedile, bachelor student at University of Udine (Italy), Viticulture and Enology (2018-2019); S. Malfatti, bachelor student at University of Verona (Italy), Technician of Biomedical Laboratory (2013-2014); C. Dolzani, bachelor student at University of Verona (Italy), Technician of Biomedical Laboratory (2011-2012); V. Roccaforte, bachelor student at University of Verona (Italy), Technician of Biomedical Laboratory (2008-2009);

- Lab technicians [n. 5]: E. Banchi, L. Poles, C. Dolzani, P. Bettinelli e D. Nicolini (sequentially, 2011-present).

Personal skills and competences

Mother tongue
Other languages
Self-assessment
European level ()*

Italian

English

French

Understanding		Speaking		Writing
Listening	Reading	Spoken interaction	Spoken production	
B2	C1	B2	C1	C1
C1	C1	B1	B2	B1

(*) *Common European Framework of Reference for Languages. Legend:*

A Basic Speaker

A1 Breakthrough

A2 Waystage

B Independent Speaker

B1 Threshold

B2 Vantage

C Proficient Speaker

C1 Effective Operational Proficiency

C2 Mastery

Note:

English

- attended an intensive course (01/2002 - 02/2002) at "The Salisbury School of English", Salisbury (UK), accredited by British Council
- attended an advanced course (10/2002 - 05/2003) at "The British School", Piacenza (Italy), accredited by British Council
- lived for nine months during 2003-2004 in Davis (CA-USA)
- lived for six weeks during 2007 in Salt Lake City (UT-USA)

French

- studied at Middle School (three years) and at High School (two years)
- lived for five months during 2006 in Montpellier (France)

Social skills and competences

Empathy and inclination to team work.
Assertiveness and open-mindedness.
Independence, resourcefulness and resilience.
Resolution, perseverance and steadiness.

Organisational skills and competences

Pragmatism, problem solving, foresight and vision.
Leadership and management:
- tutor of inexperienced students
- reference point for guest international MSc and PhD students
- coordinator of the team of ten colleagues (technicians, technologists, researchers): set-up of a transversal and multidisciplinary project, named LIMS (Laboratory Information Management System), at FEM-CRI
- coordinator of the writing of reviews and book chapters
- responsible for research sub-group/unit (junior and senior post-doc fellows, students and technicians)
- coordinator of research projects (both as FEM and entire Consortium) and budget manager

Technical skills and
competences

Field and greenhouse

- *Vitis* spp. cross planning for disease resistance (pre-)breeding (yearly, since 2011)
- greenhouse management in terms of pesticide treatments and experiment turn-over
- sampling of herbaceous and woody plant germplasms and segregating populations
- measurements of morphological, phenological and agronomical traits in grapevine
- optimization of the grapevine fruiting cutting agronomical practice, allowing blooming in 3-4 months
- fungal pathogen propagation *in vivo*
- downy mildew, powdery mildew and black rot inoculation on different grapevine organs
- treatments on different grapevine organs with abiotic stilbene elicitors

Laboratory

- chemical analysis: sugar, tartaric acid and stilbene content in different grapevine tissues (root, leaf, berry)
- DNA and RNA extraction from various plant materials (root, stem, leaf, flower, fruit) of different species
- electrophoresis on agarose gel; staining by Etidium Bromide and GelRed
- total protein extraction from grapevine leaves and truffles
- monodimensional and bidimensional (2-D) electrophoresis on SDS-PAGE gel; staining by Comassi Blue
- general molecular technologies: PCR, cloning, cDNA synthesis, RT-PCR, Real-time RT-PCR (SYBR Green)
- radioactive-based (P^{32} and P^{33}) hybridisation: Southern blot (RFLP), northern blot, BAC library hybridisation, AFLP, Transposon Display
- polyacrylamide gel electrophoresis: SSR, non-redundant cDNA-AFLP (AFLP-TP), Transposon Display; Silver staining
- capillary electrophoresis on ABI 3100, ABI 3130xl, ABI 3730xl genetic analysers: SSR, AFLP, Transposon Display, minisequencing (SNaPshot), SNPlex, Sanger sequencing
- pyrosequencing on Genome Sequencer FLX System (454 Life Sciences-Roche Diagnostics)
- use of robotic workstations for automated DNA manipulation: 8-tip MultiProbe, 96-tip TECAN Freedom Evo.
- optimization of fungal pathogen propagation *in vitro*
- set-up of conditions for a high-throughput *in vitro* phenotyping method for disease resistance assessments

Computer skills and
competences

Operating systems:

- Windows 2000-2015, Linux (basics)

Microsoft applications:

- Word, Excel, Power Point, Explorer

Database mining:

- SQL (basics)

Specific software packages for:

- statistical analysis: Statistica, R (basics)
- primer design: Generunner, Primer3
- sequence analysis and alignment: Sequencing Analysis, Staden Package v.4, BioEdit, MultAlin, ClustalW
- fragment analysis: GeneScan, Genotyper, GeneMapper v.5
- haplotype inference: Phase
- linkage mapping: MapMaker, Chartagène, Joinmap v.4.1, TMAP
- visualization tools: MapChart, Pedimap
- diversity, pedigree and structure analysis: Mstrat, PAST, Cervus, GenAlEx, Structure
- genotype-phenotype association analysis: MapQTL v.6, FlexQTL, TASSEL v.3

Refresher courses

Security and Law

- 2020: Course "COVID-19: gestione del rischio e misure di sicurezza" by FEM in San Michele all'Adige (TN) (Italy) (2 hours)
- 2018: Course on "Formazione aggiuntiva specifica sulla sicurezza dei lavoratori – Ruolo di preposto", by FEM in San Michele all'Adige (TN) (Italy) (8 hours)
- 2016: Course on "Formazione specifica rischio basso", by FEM in San Michele all'Adige (TN) (Italy) (4 hours)
- 2015: Update on "Diffusione del modello di gestione e organizzazione (MOG)", by FEM in San Michele all'Adige (TN) (Italy) (2 hours)
- 2015: Course on "Stress lavoro correlato", by FEM in San Michele all'Adige (TN) (Italy) (4 hours)
- 2013: Course on "Formazione generale sicurezza dipendenti", by FEM in San Michele all'Adige (TN) (Italy) (8 hours)

Genetics and Bioinformatics

- 2016: Training course on "Linux operating system - Basics and Advanced", by FEM in San Michele all'Adige - TN (Italy) (24 hours)
- 2014: Training on "Visual FlexQTL - Advanced", by Biometris subd. in Plant Research International, Wageningen (Netherlands) (5 days)
- 2013: Training on "Pedigree-Based Analysis and FlexQTL software - Basics", by Biometris subd. in Plant Research International, Wageningen (Netherlands) (5 days)
- 2013: Training course on "LIMS Administration 1 (V6)", by LabWare in San Michele all'Adige - TN (Italy) (5 days) (final exam score: 95/100)
- 2011: Training course on "Viia7 Real-Time", by Applied Biosystems in San Michele all'Adige - TN (Italy) (1 day)
- 2009: Workshop on "Grape genome annotation", by COST 858 action in Versailles (France) (3 days)
- 2009: Course on "R", by Parco Tecnologico Padano in Lodi (Italy) (3 days)
- 2006-2007-2008: Workshop on "Genotyping methodologies for research in the agro-alimentary sector", by Applied Biosystems and Parco Tecnologico Padano in Lodi (Italy) (1 day)
- 2003: Workshop on "Bioinformatics", by Biotechnology Foundation in Torino (Italy) (2 days)
- 2002: Workshop on "Innovative methods to transfer genes within plants", by Biotechnology Foundation in Torino (Italy) (2 days)

Driving licence

B (Car)