

CURRICULUM VITAE

ELIDE FORMENTIN

ACADEMIC CAREER

- Dates (from – to) **MAY 2016 – TODAY**
- Name of employer University of Padova
- Department Biology
- Occupation or position held Assistant Professor in Plant Biology (BIO/04)
- Main activities and responsibilities Adaptation and tolerance of plants to abiotic stress in changing environmental conditions

- Dates (from – to) **ACADEMIC YEAR 2015-2016**
- Name of employer University of Ferrara
- Department Life Sciences and Biotechnology
- Occupation or position held Adjunct Professor in Plant Biology (BIO/04)
- Main activities and responsibilities Teacher of Advanced Plant Molecular Biology in the Master degree in Biomolecular and Evolutionary Sciences (6 credits)

- Dates (from – to) **3 JUNE 2014 – 31 OCTOBER 2015**
- Name of employer Consiglio per la Ricerca e la Sperimentazione in Agricoltura
- Department CRA-VIT Conegliano (TV)
- Occupation or position held Research fellow (assegnista)/ participation in the project "Valorizzazione dei principali vitigni autoctoni italiani e dei loro terroir" (VIGNETO), funded by MiPAAF
- Main activities and responsibilities Gene expression studies through novel mutagenesis approaches in *Vitis vinifera*. Supervisors: Dr. Manna Crespan (CRA-VIT) and Prof. F. Lo Schiavo (University of Padova)

- Dates (from – to) **APRIL – MAY 2014**
- Name of employer University of Padova
- Department Department of Biology, Laboratory of Plant Molecular Biology
- Occupation or position held External consultant (prestazione d'opera occasionale)/ participation in the project "Integrated Genetic and Genomic Approaches for New Italian Rice Breeding Strategies (Risinnova)" funded by Ager Fondazione in rete per la ricerca Agroalimentare
- Main activities and responsibilities Analysis of transcriptomic data coming from Italian rice varieties under salt stress. Building of metabolic maps. Supervisor: Prof. Fiorella Lo Schiavo

- Dates (from – to) **JANUARY 2012 – DECEMBER 2013**
- Name of employer University of Padova
- Department Department of Biology, Laboratory of Plant Molecular Biology
- Occupation or position held Research fellow (assegnista di ricerca) / participation as PARTNER INVESTIGATOR in the project "Integrated Genetic and Genomic Approaches for New Italian Rice Breeding Strategies (Risinnova)" funded by Ager Fondazione in rete per la ricerca Agroalimentare
- Main activities and responsibilities Analysis of ion transport and study of signalling pathways in salt stress tolerance in Italian rice cultivars Supervisor: Prof. Fiorella Lo Schiavo

- Dates (from – to) **DECEMBER 2010 – DECEMBER 2011**
- Name of employer University of Padova
- Department Department of Biology, Laboratory of Photosynthesis
- Occupation or position held Research fellow (assegnista di ricerca) / participation in the project PRIN 2010 to Szabò
- Main activities and responsibilities Plant mitochondrial ion channels: electrophysiological characterization, bioenergetics and functionality Supervisor: Prof. Ildikò Szabò

- Dates (from – to) **SEPTEMBER 2010 - NOVEMBER 2010**

- Name of employer University of Foggia
 - Department Interdepartmental Research Center BIO-Agromed
 - Occupation or position held Term-contract worker / participation in the project Laboratorio di GENomica per caratteri di importanza AGRonomica in frumento duro: identificazione di geni utili, analisi funzionale e selezione assistita con marcatori molecolari per lo sviluppo della filiera sementiera nazionale (AGRO-GEN) funded by PON R&C
 - Main activities and responsibilities Rice mitochondrial ion channels
Supervisor: Prof. Donato Pastore
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- Dates (from – to) **SEPTEMBER 2009 - AUGUST 2010**
 - Name of employer University of Padova
 - Department Department of Biology, Laboratory of Photosynthesis
 - Occupation or position held Post-graduate fellowship
 - Main activities and responsibilities Functional characterization of plant mitochondria
Supervisor: Prof. Ildikò Szabò
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- Dates (from – to) **JUNE 2008 - AUGUST 2009**
 - Name of employer CIB, Consorzio Interuniversitario Biotecnologie
 - Department CRIBI Biotechnology Centre, Laboratory of Plant Molecular Biology
 - Occupation or position held Research and Advanced Training Fellowship
 - Main activities and responsibilities Study of the K⁺ channels in Vitis vinifera in order to improve the nutrients uptake and the properties of wine
Supervisor: Prof. Fiorella Lo Schiavo
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- Dates (from – to) **MARCH 2007 - MARCH 2008**
 - Name of employer University of Foggia
 - Department Interdepartmental Research Center BIO-Agromed
 - Occupation or position held Term-contract worker / participation in the project Laboratorio di GENomica per caratteri di importanza AGRonomica in frumento duro: identificazione di geni utili, analisi funzionale e selezione assistita con marcatori molecolari per lo sviluppo della filiera sementiera nazionale (AGRO-GEN) funded by PON R&C
 - Main activities and responsibilities Isolation and subcellular localization of potassium channels in the rice and durum wheat mitochondria
Supervisor: Prof. Donato Pastore
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- Dates (from – to) **MAY 2006 - OCTOBER 2006**
 - Name of employer University of Padova
 - Department Department of Biology, Laboratory of Plant Molecular Biology and Photosynthesis
 - Occupation or position held Post-graduate fellowship
 - Main activities and responsibilities Characterization of potassium channels in plant cells
Supervisors: Prof. Fiorella Lo Schiavo and Prof. Ildikò Szabò
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- Dates (from – to) **MAY 2002 - APRIL 2006**
 - Name of employer University of Padova
 - Department CRIBI Biotechnology Centre, Laboratory of Plant Molecular Biology
 - Occupation or position held Research fellow (assegnista di ricerca) L. 449/1997
 - Main activities and responsibilities Molecular characterization and physiological regulation of potassium channels in plants
Supervisor: Prof. Fiorella Lo Schiavo
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- Dates (from – to) **DECEMBER 2001 - MARCH 2002**
 - Name of employer University of Padova
 - Department CRIBI Biotechnology Centre, Laboratory of Plant Molecular Biology
 - Occupation or position held Post-graduate fellowship funded by MIPA
 - Main activities and responsibilities Cloning of plant potassium channels
Supervisor: Prof. Fiorella Lo Schiavo
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- Dates (from – to) **SEPTEMBER 1998 - MARCH 1999**
 - Name of employer University of Padova

- Department CRIBI Biotechnology Centre, Laboratory of Genomics
- Occupation or position held Telethon post-graduate fellowship project B41
- Main activities and responsibilities Integrated molecular analysis of gene expression in human skeletal muscle
Supervisor: Prof. Gerolamo Lanfranchi

TEACHING ACTIVITIES

- Dates (from – to) **ACADEMIC YEARS 2016/2017 AND 2017/2018**
- Name of employer University of Padova
- Degree / Course / Teacher Degree in Biology/Plant Physiology / Dr. Zottini Michela
- Occupation or position held Assistant professor
- Topic Teaching assistant

- Dates (from – to) **ACADEMIC YEARS 2016/2017 AND 2017/2018**
- Name of employer University of Padova
- Degree / Course / Teacher Master Degree in Industrial Biotechnology/Plant Molecular Biology / Dr. Zottini Michela
- Occupation or position held Assistant professor
- Topic Laboratory training

- Dates (from – to) **ACADEMIC YEAR 2015/2016**
- Name of employer University of Ferrara
- Degree / Course / Teacher Master Degree in Biomolecular and Evolutionary Sciences/ Advanced Plant Molecular Biology / Dr. Elide Formentin
- Occupation or position held Adjunct Professor in Plant Biology
- Topic Molecular Biology of Plants

- Dates (from – to) **ACADEMIC YEARS FROM 2005 / 2006 TO 2009 / 2010**
- Name of employer University of Padova
- Degree / Course / Teacher 1st cycle (bachelor-level) Degree in Molecular Biology / Model organisms / Dr. Gabriella Mazzotta
- Occupation or position held Lecturer
- Topic The model organism Arabidopsis thaliana

- Dates (from – to) **ACADEMIC YEAR 2013 / 2014**
- Name of employer University of Padova
- Degree / Course / Teacher 1st cycle (bachelor-level) Degree in Molecular Biology / Molecular Biology / Prof. P. Benedetti
- Occupation or position held Teaching assistant

- Dates (from – to) **ACADEMIC YEAR 2012 / 2013**
- Name of employer University of Padova
- Degree / Course / Teacher 1st cycle (bachelor-level) Degree in Molecular Biology / Molecular Biology / Prof. P. Benedetti
- Occupation or position held Teaching assistant

- Dates (from – to) **ACADEMIC YEAR 2009 / 2010**
- Name of employer University of Padova
- Degree / Course / Teacher 1st cycle (bachelor-level) Degree in Biotechnology / Biochemistry of Metabolism / Prof. I. Szabò
- Occupation or position held Teaching assistant

- Dates (from – to) **ACADEMIC YEAR 2005 / 2006**
- Name of employer University of Padova
- Degree / Course / Teacher 1st cycle (bachelor-level) Degree in Biotechnology / Genetic Engineering and Recombinant Technologies / Dr. M. Zottini
- Occupation or position held Teaching assistant

- Dates (from – to) **ACADEMIC YEAR 2003 / 2004**
- Name of employer University of Padova

- Degree / Course / Teacher 1st cycle (bachelor-level) Degree in Biotechnology / Genetic Engineering and Recombinant Technologies / Dr. M. Zottini
- Occupation or position held Teaching assistant
- Dates (from – to) **ACADEMIC YEAR 2002 / 2003**
- Name of employer University of Padova
- Degree / Course / Teacher 1st cycle (bachelor-level) Degree in Biotechnology / Molecular Biology / Prof. P. Benedetti
- Occupation or position held Teaching assistant
- Dates (from – to) **ACADEMIC YEAR 2001 / 2002**
- Name of employer University of Padova
- Degree / Course / Teacher 1st cycle (bachelor-level) Degree in Molecular Biology / Molecular Biology / Prof. R. Bisson
- Occupation or position held Teaching assistant

WORK EXPERIENCES IN INTERNATIONAL INSTITUTIONS

- Dates **MARCH 18-JUNE 18, 2017**
- Name and type of organisation providing education and training Institute for Integrative Genome Biology – Botany and Plant Sciences Department, Riverside, CA, USA
- Principal subjects/occupational skills covered Molecular Biology and Bioinformatics in rice
- Title of qualification awarded International Scholar with a travel grant from Distinguished Professor Natasha Raikhel, Member of the National Academy of Sciences and former Director of the Institute for Integrative Genome Biology
- Supervisor Distinguished Professor Julia Bailey-Serres, Member of the National Academy of Sciences and Director of the Center for Plant Cell Biology
- Duration 3 months
- Dates **OCTOBER 2000**
- Name and type of organisation providing education and training Department of Genetics IBMB – Barcelona (Spain)
- Principal subjects/occupational skills covered Northern blot, TUNEL, programmed cell death
- Supervisor Prof. P. Puigdomenech
- Duration 1 month

EDUCATION AND TRAINING

- Dates **6 FEBRUARY 2002**
- Name and type of organisation providing education and training University of Padova, CRIBI Biotechnology Centre
- Principal subjects/occupational skills covered Plant molecular biology, plant mitochondria, plant senescence
- Title of qualification awarded PhD in Biotechnology
- Level in national classification Dottorato in Biotecnologie
- Duration 3 years
- Dates **OCTOBER 2000**
- Name and type of organisation providing education and training Department of Genetics IBMB – Barcelona (Spain)
- Principal subjects/occupational skills covered Northern blot, TUNEL, programmed cell death
- Duration 1 month
- Supervisor Prof. P. Puigdomenech

- Dates **NOVEMBER 1999**
- Name and type of organisation providing education and training University of Padova
- Principal subjects/occupational skills covered molecular biology
 - Title of qualification awarded State examination to practice the profession of Biologist
 - Level in national classification Esame di Stato per l'abilitazione all'esercizio della professione di Biologo
 - Duration 1 year training

- Dates **6 JULY 1998**
- Name and type of organisation providing education and training University of Padova
- Principal subjects/occupational skills covered Characterization of murine transcripts specific of skeletal muscle
 - Supervisors: Prof. G. Valle and Prof. G. Lanfranchi
 - Title of qualification awarded Degree in Biology
 - Level in national classification Laurea in Scienze Biologiche
 - Duration / vote 5 years / 110 cum laude

- Dates **OCTOBER 1999**
- Name and type of organisation providing education and training University of Bologna
- Principal subjects/occupational skills covered Bioinformatics
 - Title of course Bologna Summer School (BOSS) "Protein sequence analysis in the genomic era"

- Dates **JANUARY 1998**
- Name and type of organisation providing education and training University of Padova
- Principal subjects/occupational skills covered Perl5 programming language
 - Title of course Perl5

TECHNICAL SKILLS AND COMPETENCES

PLANT AND ANIMAL MOLECULAR BIOLOGY AND BIOCHEMISTRY:

- CLASSICAL TECHNIQUES OF MOLECULAR BIOLOGY AND GENETIC ENGINEERING (EXTRACTION OF NUCLEIC ACIDS AND PROTEINS, PCR, RT-PCR, REAL TIME PCR, CLONING, INSERTIONAL MUTAGENESIS, 2D GELS, ...)
- ANALYSIS OF SOUTHERN BLOT, NORTHERN BLOT, WESTERN BLOT
- USE OF AUTOMATED SEQUENCERS AND ROBOT STATIONS
- ISOLATION OF PLANT MITOCHONDRIA FOR BIOCHEMICAL AND ELECTROPHYSIOLOGICAL ASSAYS

BIOINFORMATICS:

- STANDARD PROTEIN AND DNA SEQUENCE ANALYSIS
- ANALYSIS OF -OMICS DATA (NGS OUTPUTS)
- GENE ONTOLOGY ANALYSIS

CELL BIOLOGY:

- MAINTENANCE OF PLANT AND ANIMALS CELL CULTURES
- TRANSFORMATION OF PLANTS AND PLANT CELLS
- FLUORESCENCE AND CONFOCAL MICROSCOPY

ORGANISMS:

RICE, *ARABIDOPSIS THALIANA*, GRAPE, CARROT, FERN, TOBACCO

HUMAN, MOUSE