

**CURRICULUM VITAE ET STUDIORUM**  
**MARISA MANZANO**

Name and Surname	Marisa Manzano
e-mail address	marisa.manzano@uniud.it
Nationality	Italian
Mother tongue	Italian
Second language	English
Education	Master degree in Natural Sciences at University of Padua
Position	Associate Professor - Università degli Studi di Udine
Work address	Department of Agriculture, Food, Environmental and Animal Sciences via Sondrio 2/A, 33100, Udine, Italia telefono +39 0432 558127 fax +39 0432 558130

**ACADEMIC POSITIONS**

Nov 1984 – Dec 1988	-postgraduate activity (November 1984 - October 1985) at both the University of Udine, Department of Food Science, and the Hospital of Udine S. Maria della Misericordia, Microbiology Section, working on isolation and typization of <i>Salmonellae</i> -independent researcher (October 1985 - December 1988) at the University of Udine, Food Science Institute, Microbiology Section, funded by the Regional Management of Agriculture (Italy) - responsible for the creation of the microbiology and molecular biology laboratory at the Institute of Food Science at University of Udine
Feb1989 – Oct 1990	- independent researcher (February 1989- October 1990) at the University of Udine, Food Science Institute, Microbiology Section, funded by the "Consorzio per la Tutela del Formaggio Montasio" of FVG, Italy. Topic: "Characterization of natural starter for cheese production"
21 Nov 1990 – 13 Jan 2005	- Researcher (Microbiology) (November 21 <sup>st</sup> 1990 - January 13 <sup>th</sup> 2005), University of Udine, Department of Food Science - laboratory activity assistant (1992 - 2005) for the courses: Industrial Microbiology, Soil Microbiology, Food Hygiene, Agriculture Microbiology, Wine Microbiology - member of the exams committee (1990-2005) for Industrial Microbiology, Soil Microbiology, Food Hygiene, General Microbiology, Agricultural Microbiology
1994	career break maternity leave May-December 1994
1998	career break November 1998-August 1999
Jan 13 <sup>th</sup> 2005-ongoing	Associate Professor (January13 <sup>th</sup> 2005- ongoing), University of Udine, Department of Agricultural Food Environmental and Animal Sciences
2017	- National Scientific qualification as full professor in the Italian higher education system, call 2016/2018 (Ministerial Decree n. 1532/2016) for the disciplinary field of 07/I1 - Agricultural microbiology. (Academic Recruitment Field 07/I - Agricultural microbiology, according to the national classification).

**ACADEMIC ROLES AND RESPONSABILITIES**

1991-1996	Researcher representative in the Board of the Food Science and Technology Degree
1991 - 2016	Member of the Didactic Board of the Food Science and Technology Degree (Bachelor and Master)
2021 - ongoing	Member of the Didactic Board of the Food Science and Technology Degree (Bachelor and Master)

2004 - 2007	<b>Coordinator</b> for the Department of Food Science in the cooperation for student mobility between EU-Canada in the Program for Cooperation in Higher Education and Vocational Training with CCOVI ( <i>Cool Climate Oenology and Viticulture Institute- Brock University- Canada</i> )
2004 - 2010	<b>Member</b> of the Didactic Board for the Degree Course in Viticulture and Enology
2005 - 2008	<b>Coordinator</b> of the Microbiology section of the Food Science Department
2005 - 2016	<b>Member</b> of the Collegiate of Doctorate Research in Food Science
2016 - 2021	<b>Member</b> of the Collegiate of Doctorate Research in Food Science and Human Health
2003 – 2013	<b>Coordinator</b> of the internship for students in Food Science and Technology
2017- 2021	<b>Delegate</b> of the Agriculture Food Environmental and Animal Sciences Department Director for the Sport and Study program
2019- ongoing	<b>Delegate</b> for the degree courses in Food Science and Technology with the “Ordine dei Tecnologi Alimentari of FVG Region”
2022-ongoing	<b>Vice-coordinator</b> of the Master Course in Viticulture Enology and Marketing
2023- ongoing	<b>Vice-coordinator</b> of the Research Doctorate in Food Sciences

#### MEMBER OF EXAMS COMMISSIONS, MEMBER OF PUBLIC EXAMS ACTIVITY

1990 -2005	<b>Member</b> of the exams committee for the Industrial Microbiology, Soil Microbiology, Food Hygiene, General Microbiology Master Degree courses
2001	<b>Member</b> of the Committee for the Competitive exam for a University Researcher position (Agricultural Faculty, Food and Environmental Microbiology)
2005 ongoing	<b>Member</b> of the State Exam Commission Dottore Agronomo e Dottore Forestale, Section Food Science and Food Science and Technology
2006	<b>Member</b> of the Committee for the public examination for a technician at the Food Science Department at University of Udine
2011	<b>President</b> of the Public State Exam Committee for the licence in Food Science and Technology job
2011	<b>Member</b> of the Public Exam Committee for 12 months research position at University of Udine
2011	<b>President</b> of the Public Exam Committee for 12 months research position at University of Udine
2013	<b>Member</b> of the Committee for the Food Science Doctorate in Food Science XXV cycle final exam
2015	<b>Member</b> of the Committee for the Food Science Doctorate in Food Science XXV cycle final exam
2017	<b>Member</b> of the Public Exam Committee for 12 months research position at University of Udine project “Head Higher Education and Development”
2018	<b>Member</b> of Public Exam Committee for 12 months research position at University of Udine
2020	<b>President</b> of the State Exam Commission for the licence in Food Science and Technology job
2020	<b>Member</b> of the Public Exam Committee for 12 months research position at University of Udine
2021	<b>Member</b> of the Public Exam Committee for 12 months research position at University of Udine
2022	<b>President</b> the Public Exam Committee for 12 months research position at University of Udine
2023	<b>Member</b> of the Public Exam Committee for 12 months research position at University of Udine
2023	<b>President</b> of the State Exam Commission for the licence in Food Science and Technology job

ERASMUS COORDINATOR FOR STUDENT AND STAFF MOBILITY	
2014- ongoing	Slovak University of Agriculture, Nitra, Slovakia
2011- 2016	University of Technology of Troyes, Troyes, France
2012- ongoing	Karamanoglu Mehmetbey University, Karaman, Turkey
2012- ongoing	Universidad Politecnica de Madrid, Spain
2014- ongoing	Pierre et Marie Curie University, Paris, France
2016- ongoing	Claude Bernard Lyon 1 University, Lyon, France
2018- ongoing	Responsabile della mobilità di studenti di dottorato con l'INRAE, Jouy-en-Josas, Francia

DIDACTIC ACTIVITY	
DIDACTIC ACTIVITY AT UNIVERSITÀ DEGLI STUDI DI UDINE	
1986 - ongoing	Member of the Degree Committee in Food Science and Technology bachelor and master (since 1993) Viticulture and Enology (since 2004) Viticulture and Enology and Marketing (since 2010)
1992 - 2005	Laboratory Assistant for the courses - Industrial Microbiology - Soil Microbiology - Food Hygiene - General Microbiology Generale - Wine Microbiology - Food Microbiology
1994-1999	50 h teaching - "Food Microbiology" - University Course in Food Technology and Viticulture and Enology
1999 - 2000	FOOD SCIENCE AND TECHNOLOGY DEGREE 30 h teaching - "Biotechnology of Microorganisms" and 40 h teaching - "Genetic of Microorganisms"
2000-2003	40 h teaching - "Biotechnology of Fermentations"
2000 – ongoing	FOOD SCIENCE AND TECHNOLOGY DEGREE 40 h teaching - "Genetic of Microorganisms"
2000 - ongoing	FOOD SCIENCE AND TECHNOLOGY DEGREE 40 h teaching - "Biotechnology of Microorganisms"
2002 – 2017	20 h teaching - "Selection and utilization of yeasts for enological applications"
2005 – ongoing	40 h teaching in ENGLISH - "Biomolecular Techniques Applied to Food Microbiology"
2010 – ongoing	50 h teaching in ENGLISH - "Molecular Techniques for the identification of the microorganisms"

DIDACTIC ACTIVITY AT OTHER ITALIAN UNIVERSITIES OR RESEARCH CENTRES	
1992-1993	Consortium of the Universities of Padova, Venezia, Verona, Trento and Udine (CUOA) Teaching subject: "Food Microbiology"
1992-1993	Regional Centre for Research in Enology of Conegliano, University Consortium for the Administration and Marketing, Universities of Padova, Verona, Trento and Udine. Subject of teaching: General Microbiology and Wine Microbiology
2005	University Master in Science of Grappa- Istituto S. Michele all'Adige (University Consortium- Universities of Udine and Trento) – 6 h
2005-2006	University di UDINE, Scuola di specializzazione per l'insegnamento nella scuola secondaria (ssis) - Teaching: "Analyses of Food Microbiology" - 10 h

2006	Azienda Speciale Ricerca e Formazione (CCIAA), Course of Viticulture techniques "Management of Microorganisms in wine cellars" 6 h
2006	Agenzia Regionale per lo Sviluppo Rurale "Attività di Formazione per Agenti di Sviluppo nel Settore Vitivinicolo" – Viticulture and Enology course. Teaching: " Management of microbial fermentations" 5 h
2007	University Master "Manager della filiera cerealicola", , University of Teramo 8 h
2008	ALFORM project (High Education): Fase Area Skills, Cluster Agricoltura e Alimentazione 4 h

#### INTERNATIONAL DIDACTIC ACTIVITY

2010- ongoing	50 h teaching for the INTERNATIONAL Master VINIFERA (EMAVE) "Molecular Techniques for the identification of the microorganisms" borrowed from Master degree with the UNIVERSITY of BOLZANO, PADOVA, VERONA
2012	5 h teaching "Biotechnology" level BSc- MSc Valencia, Spain, September 4 <sup>th</sup> -7 <sup>th</sup> , 2012 LLP ERASMUS PROGRAMME- INDIVIDUAL TEACHING PROGRAMME FOR TEACHING STAFF MOBILITY
2013	5 h teaching "Molecular Biology Techniques application in food microbiology analysis" level MSc Valencia, Spain, November 28 <sup>th</sup> 2013
2013	35 h teaching "Molecular Biology" level MSc (at CREATE) Technological University Singapore August 29 <sup>th</sup> - September 9 <sup>th</sup> 2013

#### THESIS TUTOR/CO-TUTOR (124)

**LM-70 FOOD SCIENCE AND TECHNOLOGY (56 thesis)**

**L-26 FOOD SCIENCE AND TECHNOLOGY (43 thesis)**

**LM-69 (INTER-ATENEO) VITICULTURE ENOLOGY AND MARKETING (6 thesis)**

**L-25 VITICULTURE AND ENOLOGY (12 thesis)**

**LM PLANT and ANIMAL BIOTECHNOLOGY (3 thesis)**

**LM-79 MOLECULAR BIOTECHNOLOGY (1 thesis)**

**EUROPEAN MASTER IN VITICULTURE AND ENOLOGY – MASTER VINIFERA EMAVE (2 thesis)**

**LM BIOLOGY SCIENCES UNIVERSITA'DEGLI STUDI DI TRIESTE**

**STUDENT MOBILITY SUPERVISOR (12 Master students) at UNIVERSITIES and RESEARCH CENTRES**

2007-2024	<ul style="list-style-type: none"> <li>- Brock University, St. Catharines, Ontario, presso il CCOVI</li> <li>- Laboratoire de Nanotechnologie et Instrumentation Optique, Universite de Technologie de Troyes – Troye – France</li> <li>- Institut des Sciences Analytiques - Université Claude Bernard LYON 1 – France</li> <li>- Public Health England di Colindale- London – UK</li> <li>- Department of Biotechnology Engineering - Ben Gurion University – Israel</li> <li>- INRAE - Jouy-en-Josas- France</li> <li>- University College Dublin - Ireland</li> </ul>
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## THESIS AWARDS

1993 – 1994	Co-Relatore della miglior tesi in Scienze degli Alimenti, Associazione Italiana Tecnologie Alimentari, AITA (Luca Simone Cocolin, Titolo della tesi: Ottimizzazione di una metodica PCR per l'isolamento e l'identificazione di <i>Campylobacter</i> enterici da carni di pollo del commercio. Relatore Prof. G. Comi, correlatrice Dr.ssa Marisa Manzano)
2011	Relatore della miglior tesi in Viticoltura ed Enologia a.a. 2009-2010, (8° Premio Collio anno 2011) (Rinaldo Turus, Titolo della tesi: <i>Saccharomyces cerevisiae</i> (var. <i>bayanus</i> ) in mosto di Picolit: valutazione del processo fermentativo. Relatrice Prof.ssa Marisa Manzano; correlatori Dr. Piergiorgio Comuzzo, Dr. Marco Fontanot)

## DOCTORATE STUDENTS SUPERVISOR

### FOOD SCIENCE DOCTORATE (UniUD)

2003-2006	(XVIII° ciclo) Supervisore della Dr. Cristina Giusto "Impiego di Tecniche di Biologia Molecolare per Caratterizzare Microrganismi di interesse alimentare"
2008-2011	(XXIII° ciclo) Supervisore della Dr. Francesca Cecchini "Probe and Primer design for specific DNA fragment detection"
2011-2014	(XXV° ciclo) Supervisore del Dr. Marco Fontanot "Sviluppo di metodiche rapide (biochip e biosensori a DNA) per la ricerca di microorganismi patogeni di interesse medico-veterinario a trasmissione alimentare"

### DOCTORATE IN FOOD AND HUMAN HEALTH (UniUD)

2016-2019	(XXXII° ciclo) Supervisore della Dr. Priya Vizzini "Development of Electrochemical biosensors for food health: detection of <i>Listeria monocytogenes</i> and <i>Campylobacter</i> spp."
2021- ad oggi	(XXXVII° ciclo) Supervisore della Dr. Debora Pinamonti "New strategies to face antibiotic resistance in healthcare and food sectors"

### DOCTORATE UNESCO SCIENCES OF THE ENERGETIC AND ENVIRONMENTAL ENGINEERING

2022- ad oggi	(XXXVII° ciclo) PhD UNESCO in Sciences of the energetic and environmental engineering Co-Supervisore della Dr. Alessia Cossettini "Biosensors for the detection of contaminants in wastewater"
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### COORDINATOR/SUPERVISOR for DOCTORATE AND POST-DOC STUDENT MOBILITY

2010	- Department of Biotechnology Engineering - Ben Gurion University – Beer Sheva - Israel
2012	- Laboratoire de Nanotechnologie et Instrumentation Optique, Universite de Technologie de Troyes – Troye - France
2018	- INRAE - Jouy-en-Josas - France
2021	– Ben Gurion University of the Negev (BGU), Dipartimento di ingegneria di electro-ottica e fotonica Beer Sheva - Israele

### INTERNATIONAL DOCTORATE

2017-2023	Member of the Advisory Committee for the doctorate entitled "Development of biosensor for the detection of hepatitis A and E through innovative electrochemical and molecular methods" Health Science Faculty at University of Patras, Grecia, student Zoi Kotsiri
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### PATENTS

NATIONAL PATENT C12Q, F1 5200 0 (Italy) (1996)
INTERNATIONAL PATENT C12Q 1/6825 (France, fr 20 05578 2020) International Publication Number WO 2021/240299 A1 (2021)
NATIONAL PATENT S/B BI803E/RVP/rmc (Italy, it 102020000012496) (2020)

## RESEARCH TOPICS

### FOOD MICROBIOLOGY

Development and optimization of biosensors based on the utilization of single strand DNA probes (genosensors) and on the utilization of aptamers (aptasensors) for the detection of pathogenic microorganisms in foods by the utilization of optical systems (fiber optic), Surface Plasmon resonance (SPR), Localized Surface Plasmon resonance (LSPR), electrochemistry and Quartz Crystal Microbalance (QCM)

Differentiation of *Bacillus cereus* and *B. thuringiensis* and their spores using molecular methods and electrochemical biosensors

Optimization and utilization of molecular methods (PCR, RT-PCR, qPCR, DGGE, dot blot) for the detection and identification of spoiler and pathogenic microorganisms present in foods, beverages, animals and waters and to follow fermentative food and beverage processes by primer and DNA probe design. Zinc nanoparticles to improve the signal.

Evaluation of Antimicrobial activity of Zinc nanoparticles (for packaging application)

Identification of microorganisms of uncertain position, uncultivable microorganisms like *Candidatus Arthromitus* e *Rickettsia* by molecular biology techniques and specific ssDNAprobes.

Utilization of treatments for the reduction of microbial charge on food surfaces

Study of microbial populations in fermentative process of foods and biocontrol techniques

Aseptic packaging: industrial sterilization systems validation

Evaluation of Antimicrobial activity of chemical treatments on meals used for food industry application

Aptamer evaluation for specificity and sensitivity

Antibiotic Resistance

### WINE MICROBIOLOGY

Development and optimization of biosensors based on the utilization of single strand DNA probes (genosensors) and on the utilization of aptamers (aptasensors) for the detection of microorganisms of interest for enological applications *Brettanomyces bruxellensis* and *Oenococcus oeni* and for their quantification.

Identification, differentiation of yeast and bacteria strains present during alcoholic fermentation of wine and beer (*Saccharomyces* sensu stricto, *Saccharomyces cerevisiae* e/o *S. carlsbergensis*) with molecular methods

Metal activity evaluation on enological yeasts.

### AUTHOR/CO-AUTHOR

scientific products at IRIS <https://air.uniud.it/>

**122 PAPERS** in International Journals

**45 PAPERS** in National Journals

**14** Book chapters

**8** Abstract in Journals (WOS)

**28 PAPERS** in Conference Proceedings

**62** Abstract in Conference Proceedings

**61** Poster in Conferences

### PROJECTS SUBMISSION

1990-91 Project COST 68 della CEE on compost plants

1991 Italian Project "Ricerche Avanzate per Innovazioni nel Sistema Agricolo (RAISA)"

1992	Italian Project- CONSIGLIO NAZIONALE DELLE RICERCHE - 92.01236.CT06 "Effetti di Rame, cadmio, piombo e metanolo su crescita, attività superossido-dismutasicia e catalasica in diversi ceppi di lievito ( <i>Saccharomyces cerevisiae</i> e <i>Candida boidinii</i> )
1993	Italian Project CONSIGLIO NAZIONALE DELLE RICERCHE - 93.02457.CT06 "Effetti di Rame, cadmio, piombo e metanolo su crescita, attività superossido-dismutasicia e catalasica in diversi ceppi di lievito ( <i>Saccharomyces cerevisiae</i> e <i>Candida boidinii</i> )"
1994	Italian Project CONSIGLIO NAZIONALE DELLE RICERCHE - 94.01083.CT06 "Meccanismi di tossicità del rame su ceppi di <i>Saccharomyces cerevisiae</i> e <i>Candida boidinii</i> resistenti e non al metallo"
1998	Italian Project PRIN 9807031001_005 "Dinamica dei cambiamenti di variabili chimiche e fisiche e delle loro interazioni negli alimenti durante la trasformazione e conservazione"
2001	Italian Project PRIN 2001072797_003 "Studio mediante procedure molecolari e convenzionali della diversità microbica a livello di specie e di ceppi ricorrenti in fermentazioni alimentari: il salame friulano tradizionale"
2002	European Project (SAFETYSAUSAGE) ICA4-CT 2002-10037 "Safety of traditional fermented sausages: Research on Protective culture and bacteriocins"
2002	Italian Project PRIN 2003 "Applicazione dei metodi molecolari per il monitoraggio di <i>Brettanomyces</i> e <i>Dekkera</i> spp. durante la fermentazione e l'affinamento del vino." - 2002073198_003
2003	Italian Project of the Regione Friuli-Venezia-Giulia L.R. 3/98, art. 16 L.R.3/98 art. 16, (2002- 2004) "Caratterizzazione e valorizzazione delle birre artigianali prodotte nelle microbirrerie del Friuli Venezia Giulia"
2004	Project ISEK13 "Packaging: formulation of edible films; studies of CO <sub>2</sub> diffusion in a food model system in M.A.P.
2005	Italian Project DM 18 MIUR programma strategico 9. Valorizzazione dei prodotti tipici dell'agroalimentare e sicurezza alimentare attraverso nuovi sistemi di caratterizzazione e garanzia di qualità" idea progettuale "LIEVITA – Lieviti per vini italiani: Selezione e produzione di lieviti autoctoni e derivati per garantire la qualità e la tipicità del vino made in Italy"
2005	European Project PF6-FOODCT-2005-007081 "PathogenCombat: control and prevention of emerging and future pathogens at cellular and molecular level throughout the food chain" at Department of Food Science, University of Udine.
2008	Italian Project Lr 26/2005 art. 23 "Innovazione ed ottimizzazione nella filiera del prosciutto crudo tipico" tematica "Safety of traditional fermented sausages: Research on Protective culture and bacteriocins"
2008	Italian project PRIN 2008 Studio delle caratteristiche microbiologiche del latte d'asina ed eventuali applicazioni tecnologiche. - 2008Z3NSWY_004
2009 - 2010	Italian project AGER-ENOLOGIA tematica "Microbiota enologico Italico: selezione e sviluppo per l'identità territoriale e la competitività degli enopoli"
2010	Italian Project FIRB 2010 (RBFR107VML) "Basi genetiche e fisiologiche del metabolismo aerobio in <i>Lactobacillus rhamnosus</i> e <i>Lactobacillus paracasei</i> : aspetti di base e applicati"
2010	Italian project IRIDEA "Innovazione della filiera della trota iridea regionale per il miglioramento della qualità e dell'interazione con l'ambiente" della Regione Friuli Venezia-Giulia
2010	European Project FP7-KBBE-2010-4 - 3.2-0.4: Innovative aquatic biosensors – "A smart, wireless, remotely operated, integrated multi-microsensor bio-monitoring system, to protect sustainable aquaculture industries, which harvests nature's bio-diversity habitat as live sensors". – BayWatchQuorum
2010	Italian Project PRIN 2010 "implementazione dei bioprocessi e del benessere animale per l'ottenimento di prodotti ovini e caprini innovativi sicuri e di qualità - 2010HZR9ZW_006
2011	International project "Rapid detection of <i>Listeria monocytogenes</i> in foods with validation using conventional techniques" First Call for Proposals on Scientific and Technological Cooperation Italy-Israel

2012	European project FP7KBBE 2012-6 proposal N.312087 "Development of an Innovative Combination Mucosal Vaccine Formulation to Immunize Farmed Fish against Pathogens" – FISHSHIELD
2013	European project Sensors for early warning on algal toxin pollution - SEaWAT - FP7-OCEAN-2013 – proposal 613833
2013	European project KBBE.2013.2.3-01: High sensitive and easily cleanable biosensors for food pathogens based on enhanced vibrational spectroscopy, fiber optics and electrochemistry integrated with microfluidic devices. - PHATOFLUIDICS
2014	European project "Quick meat-chip" H2020-ICT-2014-1 Topic ICT-02-2014 644022 – Type RIA proposal number SEP-210159058
2015	European project "Technologies for analyzing emerging microbial contaminants for water quality assessment water management" – PATHOWAT - Ministero degli Affari Esteri e della Cooperazione Internazionale – Italy Israel
2015	European project H2020 TWINN 2015 Activity H2020 TWINN 2015-1 Proposal number 692140 "Innovation in molecular biology as a tool for high quality production in organic viticulture and enology" - SMARTWINE
2016	International project COST OC-2016-1-20697 "Innovative ZnO-based nanoparticles and composites for light/solar/life science applications - ZnO-NANOLIGHTLIFE"
2016	International project COST OC-2016-2-21728 "European Network on ZnO-based Nanocomposites for Energy, ICT and Life Sciences – NANZINCOM"
2016 – 2017	International Project between Italy and France Galileo G16-6" "Reduction of Response Time for the Control of Avian Influenza Virus Through Advanced Diagnostic Method"
2017	Italian project INAIL – BRIC "Dispositivi wearable innovativi per il riconoscimento di patogeni nell'ambiente sanitario"
2017	International Project between Italy and France VINCI "Rapido rilevamento di batteri e virus mediante un biosensore con utilizzo di sonde a DNA."
2017	International Project COST OC-2017-1-22427 " European Network on Innovative ZnO-based Nanocomposites for Energy, ICT and Life Sciences
2017	Italian project "Impiego di nanoparticelle per la produzione di imballaggi intelligenti ad azione antimicrobica – NANOPACK MIPAAF – finanziamento di progetti innovativi, relativi alla ricerca e allo sviluppo tecnologico, nel campo della shelf-life dei prodotti alimentari e al confezionamento dei medesimi.
2017 – 2021	European project H2020-SFS-2016-2017, PerformFISH (727610-2) "Consumer driven Production: Integrating Innovative Approaches for Competitive and Sustainable Performance across the Mediterranean Aquaculture Value Chain"
2018	European project Alpine Space 2014-2020 – Priority 1 – Innovative Alpine Space – SO1.1 – Improve the framework conditions for innovation in the Alpine Space- "Alpes: Development leverage with cross-border cooperation - Ex Pluribus Unum"
2018	Italian project Ricerca in ambito monodisciplinare PDM_VQR3_DI4A
2020	International project GO for IT Progetto della Fondazione CRUI - D. Lgs. 196/2003 come modificato dal Decreto Legislativo 10 agosto 2018, n. 101 e dell'articolo 13 del Regolamento UE n. 2016/679 - "Detection of pathogens in food using unique plasmonic substrates" Italia
2020	Italian project MIUR – ERA-NET- Joint Transnational Call 2020 Aquatic Pollutants "Towards direct detection of antimicrobial resistant ESKAPE bacteria and their resistance genes in the water cycle"
2020	Italian project PRIN 2020 – "Fast Monitoring of Urban Wastewater for SARS-CoV-2 Detection – FAMOUS" 2020CX7HTJ
2020	Italian project MIUR-FISR – Per finanziare nuove idee di ricerca finalizzate ad affrontare le nuove esigenze e questioni sollevate dalla diffusione del virus SARS-Cov-2 e dell'infezione Covid-19 – anno 2020
2020	International project Ministero della Difesa francese Agence de l'Innovation de Défence – "Proposta progettuale "Held and Personalized Point-of Care Diagnostic Devices for COVID-19"
2020	Italian project MIUR-FISR "Sviluppo di un biosensore per il monitoraggio rapido, economico e precoce del virus SARS-CoV-2 in pazienti" - BioREP

2020	European project H2020 – Call ID: H2020-SC1-PHE-CORONAVIRUS-2020-2 – Topic: SC1-PHE-CORONAVIRUS-2020-2B Proposal: 101016096 — WeAct
2021	Italian project PocLab- Proof of Concept “Sonda per la rivelazione di infezioni batteriche. (brevetto in Italia Nr. 102020000012496 del 27/05/2020. Estensione con domanda internazionale PCT/IB2021/054241 del 18/05/2021)
2022	Italian project MUR – PRIN 2022 – CHAPEAU! CHArged Peptidomimetics to address Antimicrobial resistance Urgency” in fase di valutazione
2023	Responsible for UNIUD for the Project “Programma di valorizzazione dei brevetti”UnicalPathways” (UP)

#### INTERNATIONAL PROJECTS APPRAISER

2001-2006	Appraiser for INTAS (International Association for the promotion of co-operation with scientists from the New Independent States of the former Soviet Union)
2015	Singapore Ministry of Education-National Research Foundation Translational R&D and Innovation Fund (TIF) funds R&D projects on a competitive basis across Singapore Polytechnics and the Institute of Technical Education (ITE). Proposal MOE2015-TIF-1-T-017
2016	Innovation Centre, Events and Programs Singapore-MIT Alliance for Research and Technology (SMART) Singapore 138602 Project BIO1611011
2019	UNIVERSITÀ TOR VERGATA - Deputy Rector for Research-Beyond the Borders invitation Project 1061
2020	United States Department of Agriculture - National Institute of Food and Agriculture Agriculture and Food Research Initiative nell’ambito del Rapid Response to Novel Coronavirus (SARS-CoV-2) Impacts Across Food and Agricultural Systems Proposal 2020-06843
2020	Indian Institute of Technology Roorkee – Department of Chemistry Project: “Development of Fiber Optic Plasmonic Biosensors using Carbon nanomaterials for Detection of Blood Cancer”

#### APPRAISER of TEACHERS CURRICULUM

2014	School of Materials Science and Engineering - Nanyang Technological University - Singapore Activity of EXTERNAL REFERENCES, for curriculum of Assistant Professor at the School of Materials Science and Engineering, Nanyang Technological University, Singapore
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#### APPRAISER of NAZIONAL PhD

2017	University of PADUA (PHDFE29) PhD course in SCIENZE ANIMALI E AGROALIMENTARI XXIX cycle. Wilson José Fernandes Lemos Junior entitled “Evaluation of the non-conventional yeast <i>Starmerella bacillaris</i> as biocontrol agent and selected starter for alcoholic beverages production”
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#### ORGANIZATION OF INTERNATIONAL CONFERENCES

2006	Member of the organizing committee of the International Congress FoodMicro (Italy)
2013	Member of the organizing committee of the International Congress Oceanography (USA)
2013	Member of the organizing committee of the International Congress Biotechnology (Spain)
2018	Member of the scientific committee of the Congress World Food and Agriculture in Stockholm (Sweden)

#### CHAIRWOMAN AT INTERNATIONAL CONFERENCES

2006	Food Microbiology, 11° Workshop on Developments in the Italian PhD Research in Food Science and Technology
2006	"Current issues and concerns for pathogens and their survival along the food chain", International meeting" Food Micro2006"
2011	Eurobiotechnology Congress, Istanbul, 28 Sept – 1 Oct 2011
2011	Optical Biosensors and Nanobiophotonics Congress, Dead Sea, Israel, 5-9 Nov 2011
2013	Optical Biosensors and Nanobiophotonics II, Eilat, Israel, 8-13 February 2013
2013	European Biotechnology Congress, Bratislava, Slovakia, May 16-18 2013

#### SPEAKER AT NATIONAL AND INTERNATIONAL CONFERENCES

2005	Workshop sugli OGM all' Università di Trieste, Italy, June 2005
2008	EUROBIOTECH, Bratislava, Slovakia, September 2008
2008	NATO Conference, Perugia, Italy, November 2008
2009	Erasmus Workshop, Valencia, Spain, May 2009
2011	Eurobiotechnology Congress, Istanbul, Turkey, 28 Sept-1 Oct 2011
2011	Optical Biosensors and Nanobiophotonics Congress, Dead Sea, Israel, 05-09 Nov 2011
2012	iit (Istituto Italiano Tecnologie), Genova, Italy, February 14 <sup>th</sup> 2012,
2012	European Biotechnology Week, Valencia, Spain, September 2012
2012	CONVEGNO "PRODOTTI DESTINATI ALLA ALIMENTAZIONE. CRITERI DI QUALITÀ NEI CONTROLLI DI TIPO MICROBIOLOGICO. APPROCCI ANALITICI INNOVATIVI. "tecniche tradizionali ed innovative di identificazione microbica" Verona, 24 Oct 2012
2012	Convegno BIODIVERSITA' IN CANTINA: NUOVE PROSPETTIVE PER LA GESTIONE DEI NON-SACCHAROMYCES IN ENOLOGIA. "metodi molecolari per la rilevazione e l'identificazione di <i>Brettanomyces bruxellensis</i> in cantina" Udine, 19 giugno 2012
2012	Convegno di Formazione ed Aggiornamento Professionale. N.P.A.B., "La Diagnostica di Laboratorio: Criteri e Soluzioni Innovative", Milan, Italy,1.12.2012
2012	CONVEGNO LA DIAGNOSTICA DI LABORATORIO: CRITERI E SOLUZIONI INNOVATIVE, "Confronto tra tecniche di microbiologia classica e biologia molecolare per l'analisi degli alimenti." Milano 1 dicembre 2012
2013	European Biotechnology Congress, Bratislava, Slovakia, May 16-18 <sup>th</sup> 2013
2014	Seminar "Materiali a contatto con gli alimenti: problematiche e normative sulla sicurezza alimentare" at Unindustria Treviso, Treviso, Italy 31 March 2014
2014	Nanotechnology & Biotechnology Workshop, "Biotechnology at UNIUD", Belfast 9 <sup>th</sup> of October 2014
2015	Food, Nutrition and Agriculture Genomics Congress, London, April 29-30 <sup>th</sup> 2015
2015	Impact on Energy, Environment, Health and Water, May 27 – Jun 1, 2015, Beer Sheva, Israel
2015	FEMS, 6 <sup>th</sup> Congress of European Microbiologists, " <i>Campylobacter</i> detection in poultry meat by using an organic light emitting diode-based biochip" Maastricht, 7-11 June 2015
2017	Bio-X Conference, Tel Aviv, Israel, 4-8 June 2017
2017	Lecture at Paris Saclay University, INRA, VIM, Jouy en Josas, France December 2 <sup>st</sup> 2017
2019	Agriest 2019, Udine, Italy 24-27 January 2019
2023	BioX, Beer Sheva, Israel, April 28 <sup>th</sup> - May 5 <sup>th</sup> 2023 European Biotechnology Congress, Lubjana October 4-6 <sup>th</sup> 2023

#### PERIODS AT INTERNATIONAL RESEARCH CENTERS

30 Giu – 27 Set 1999	Viticulture and Enology Department of the University of Davis, California, USA
29 Ago – 10 Set 2013	School of Materials Science & Engineering, Nanyang Technological University, NEWRI and NRF CREATE, Singapore
24 Giu 2014 – 26 Lug 2014	Biotechnology Engineering, National Institute for Biotechnology in the Negev, Ben Gurion University of the Negev, Beer Sheva, Israel

5 Nov 2015 – 30 Giu 2016	Nanyang Technological University, School of Materials Science and Engineering, as Research Associate, Singapore
6 – 16 Lug 2017	National Research Institute for Agriculture, Food and the Environment - INRAE (France) project Galileo

#### SCIENTIFIC COLLABORATIONS

1984-1985	Microbiology Section of the Ospedale Civile di Udine S. Maria della Misericordia.
1992-2002	Department of Biology, Università di Padova, Facoltà di Scienze Fisiche, Naturali e Matematiche
1993-2000	Policlinico Universitario della Facoltà di Medicina dell'Università degli Studi di Udine
2010- ongoing	Biotechnology Engineering National Institute for Biotechnology in the Negev, Ben Gurion University of the Negev, Israel, "Fiber optic biosensor optimization"
2011- ongoing	University of the Technology of Troyes, France, (biosensor development) -
2013-2017	School of Materials Science & Engineering, Nanyang Technological University, NEWRI and NRF CREATE, Singapore, "DNA probe development" -
2016- ongoing	Photonics Lab, Advanced Materials and Sensors Division (V-4), CSIR- Central Scientific Instruments Organization, Chandigarh, India per lo sviluppo di biosensori ottici con sonde di DNA
2016- ongoing	IMEM CNR Parma, Italy, per lo sviluppo di un biosensore Organic Electrochemical Transistor (OEET) per la rilevazione di patogeni negli alimenti mediante sonde di DNA -
2016- ongoing	Unité Virologie et Immunologie Moléculaires, UR892, Institut de la Recherche Agronomique (INRAE), France, tematica "Sviluppo di biosenori elettrochimici con utilizzo di aptameri"
2016- ongoing	Unité Claude Bernard Lyon 1, Lyon, France, on "Nanoparticles application in food pathogens detection"
2019- ongoing	Ilse Katz Institute for Nanoscale Science and Technology, Ben Gurion University, Israel on the development of optical biosensors (genosensors and aptasensors) SPR based
2019	Accordo di cooperazione con l'istituto INRA (Parigi) l'organizzazione no-profit INESC-MN (Protogallo) e l'istituto no profit Biosense (Serbia) per l'utilizzo di una sonda di DNA
2019-2020	Institute of Food & Health: UCD (University College of Dublin) Centre for Food Safety, UCD School of Agriculture & Food Science, Food Science Annex of Agriculture and Food Science Centre, Ireland
2020	Institut d'Electronique, de Microélectronique et de Nanotechnologie (IEMN)- Faculté des Sciences et Technologies France

#### SCIENTIFIC BOARD

1998 – 2020	Member of SIMTREA (Società Italiana Microbiologia Agro-alimentare ed Ambientale)
2007- 2012	Member of Formica Onlus (Associazione per la Formazione il Miglioramento e l'Innovazione in Campo Alimentare)
2007-2008	Member of SIVE (Società Italiana Viticoltura ed Enologia)
2007	Member of the scientific committee of SIVE (Enoforum award)
2009- ongoing	Member dell' EBTNA (European Biotechnology Thematic Network Association)
2012-2013	Member of the committee Quality System in the laboratory of Microbiology" working group on: Choose and Validation of the Methods of analyses" (UNICHIM, affiliated UNI, Italian National Authority for the standardization
2022	Member of the American Society for Microbiology (ASM)

#### EDITORIAL BOARD of SCIENTIFIC JOURNALS

Member	
2022	Frontiers in Microbiology
2022	Scientific Report Springer Nature
2019	Micromachines MDPI

2012	Open Veterinary Journal
2012	International Journal of Wine research

#### **GUEST EDITOR of SCIENTIFIC JOURNALS**

2019	Special issue "Biosensors for Pathogen Detection" section "B: Biology" for Micromachines (ISSN 2072-666X)
2020	Special issue "Biosensors for Pathogen Detection" Volume II
2020	Special issue Women's Special Issue Series: Micromachines (ISSN 2072-666X)
2022	Scientific Reports "Food safety and foodborne diseases" Collection

#### **REVIEWR ACTIVITY**

AIMS Material Science - Analytical and Bioanalytical Chemistry - Analytical Methods - Annals of Microbiology - Antonie Van Leeuwenhoek - Archives of Microbiology - Biosensors and Bioelectronics - Biotechnology and Bioengineering - Current Microbiology - Ecotoxicology and Environmental Safety - Folia Microbiologica - Food Microbiology - Food Research International - Food Technology and Biotechnology - Frontiers in Microbiotechnology, Ecotoxicology and Bioremediation - International Journal of Wine Research - International Journal of Biotechnology and Molecular Biology Research - Italian Journal of Food Science - Journal of Applied Microbiology - Journal of Applied Microbiology and Biotechnology - Journal of Food Safety - Journal of the Institute of Brewing - LWT- Food Science and Technology - National Academy Science Letters - Open Veterinary Journal - Talanta - Transaction on Ultrasonics, Ferroelectrics and Ultra-frequency Control - Trends in Food Science & Technology - American Journal of Enology and Viticulture - Food Chemistry