

PERSONAL INFORMATION

Prof. Luca Sella



📍 Agripolis, Viale dell'Università 16 – 35020 - Legnaro (PD)

☎ 049 8272893

✉ luca.sella@unipd.it

POSITION HELD

Associate Professor (law 240/2010)

PROFESSIONAL EXPERIENCE

June 2022	National Scientific Qualification as Full Professor, scientific area 07/D1 - Plant Pathology and Entomology.
December 2014	Associate Professor at the University of Padova, Department of Land, Environment, Agriculture and Forestry (TeSAF).
September 2014	Winner of the selection process for Associate Professor position (scientific sector 07/D1 - Plant Pathology and Entomology; scientific-disciplinary sector AGR/12 - Plant Pathology)
November 2010	Confirmed tenure
November 2007	Researcher at the University of Padova, TeSAF Department.
September 2007	Winner of the comparative selection process for University Researcher at the Faculty of Agriculture (scientific-disciplinary sector AGR/12 - Plant Pathology), University of Padova
April – December 2006	Research fellow at the Department of Molecular Phytopathology and Genetics (Biocenter Klein Flottbek), University of Hamburg (Germany) thanks to an 8-month scholarship funded by the "Fondazione Ing. Aldo Gini"
September 2005 – August 2007	Postdoctoral fellow at the University of Padova
March – August 2005	Research fellow at the National Institute for Selected Seeds (ENSE – Verona Section)
February – March 2005	Research fellow at the Department of Agrobiology and Agrochemistry, University of Tuscia (VT)
January 2002 – December 2004	PhD student in Crop Protection at the University of Padova
April – December 2001	Research fellow at the Department of Agrobiology and Agrochemistry, University of Tuscia (VT)

EDUCATION AND TRAINING

2005	PhD University of Padova, Crop protection PhD ▪ Experimental thesis title: "Strategies implemented by phytopathogenic fungi to evade polygalacturonase (PG) inhibition by plant polygalacturonase inhibitor proteins (PGIPs)"
2001	Master degree in Agro-Industrial Biotechnology University of Verona ▪ Experimental thesis title: "Polygalacturonase inhibitor proteins (PGIPs) from <i>Allium porrum</i> : inhibitory activity against fungal polygalacturonases and isolation of the encoding gene"

PERSONAL SKILLS

Mother tongue	Italian
Other languages	English (professional competence)
Teaching activity	- "Biology and Management of Diseases" - Master's Degree in Agricultural Sciences and Technologies (from the 2020/2021 academic year). - "Biotechnology in Crop Protection" - Master of Science in Biotechnologies for Food Science (from the 2017-2018 academic year). - "Food Protection" (Disease Protection module) - Bachelor's Degree in Food Sciences and

Technologies (from the 2013/2014 academic year).

- "Biotechnology for Plant Protection" - Master of Science in Sustainable Agriculture – Plant Health Curriculum (2022/2023 academic year)
- "Sustainable Disease Management" - Master of Science in Sustainable Agriculture (from the 2016/2017 to the 2018/2019 academic year).
- "Fungal Ecology" - Master's Degree in Forestry and Environmental Sciences (from the 2015/2016 to the 2019/2020 academic year).
- "Phytopathological Biotechnology" - Bachelor's Degree in Agricultural Biotechnology (2012/2013 academic year).
- "Protection of Food Products from Pathogens" - Master's Degree in Food Science and Technology (from the 2009/2010 to the 2010/2011 academic year);
- "Principles of Genetics and Molecular Biology" (Molecular Biology module) - Master's Degree in Food Biotechnology (from the 2015/2016 to the 2016/2017 academic year);
- "Molecular Biology" - Bachelor Degree in Agricultural Biotechnology (from the 2008-2009 to the 2011/2012 academic year)
- "Fundamentals of Agricultural Phytopathology - Integrated Course: Teaching Plant Protection" - Special Qualifying Pathways (PAS) Course, Class A058, Agricultural Sciences and Mechanics, Farm Management Techniques, Phytopathology and Entomology (Academic Year 2013/2014).
- "Fundamentals of Agricultural Phytopathology - Integrated Course: Teaching Plant Protection" - Active Training Internship (TFA) Course, Class A058, Agricultural Sciences and Mechanics, Farm Management Techniques, Phytopathology and Entomology (Academic Year 2014/2015).

Supervisor of 5 PhD theses in "Crop Science" (University of Padova), supervisor of 17 Bachelor's theses in "Agricultural Biotechnology", 71 Bachelor's theses in "Food Science and Technology", 1 Bachelor's thesis in "Organic Production", 1 Bachelor's thesis in "Agricultural Science and Technology", 16 Master's theses in "Agricultural Science and Technology", 4 Master's theses in "Food Science and Technology", 8 Master's theses in "Sustainable Agriculture", 7 Master's theses in "Biotechnology for Food Science", 1 Master's thesis in "Forestry and Environmental Sciences" and 1 Master's thesis in "Food and Health".

Organizational and management activities and participation in Commissions

- Member of the PhD School in Crop Science at the University of Padova
- Member of the Italian Society of Plant Pathology (SIPAV)
- Member of the Selection Committee in the competitive selection process for teaching and/or management staff serving in schools within the national education system to perform support activities similar to the role of Coordinating Tutor for the Active Training Internship courses for classes A058, A072, and A012 – DAFNAE Academic Year 2014/2015 (appointed February 12, 2015, File No. 258)
- Member of the Admissions Committee for the State Examinations for the qualification to practice the profession of Agronomist and Forestry Doctor, Junior Agronomist and Forestry (2015 and 2016)
- Member of the University Tutoring Committee for the School of Agriculture and Veterinary Medicine (from the 2014/2015 to the 2022/2023 academic year)
- Member of the Examination Committee for the PhD School in Animal and Agri-food Sciences – Agri-food Production curriculum (Cycle XVIII)
- Member of the Research Working Group of the TESAF Department (from the 2015/2016 to the 2019/2020 academic year).
- Coordinator of the Research Working Group of the TESAF Department (from the 2019/2020 to the 2022/2023 academic year).
- Deputy Director of the TESAF Department (from the 2023/2024 to the 2026/2027 academic year).
- Member of the Examination Committee for the assessment of suitability for truffle hunting and harvesting (Decree No. 36 of April 13, 2016 / Renewal of Protocol No. 0000259 of February 8, 2022 - from April 2016 to September 2024)
- Member of the Scientific Committee for Area 8, Sub-Area 04 of Plant Pathology and Entomology for the four-year period 2016-2020
- Member of the Teaching Committee for the degree programs in Food Biotechnology and Biotechnology for Food Science (from Academic Year 2017/18)
- Member of the Group for Accreditation and Evaluation (GAV) of the Master of Science degree in Sustainable Agriculture (from 2017/18 to 2018/2019 academic year)
- Member of the Accreditation and Evaluation Group (GAV) for the Master of Science degree in Biotechnology for Food Science (from 2017/18 to 2020/2021 academic year)
- Review Editor for the International Journal "Frontiers in Plant Science - Plant Pathogen Interactions" (since January 17, 2018)

- Review Editor for the International Journal "Frontiers in Microbiology - Microbe and Virus Interactions with Plants" (since June 15, 2020)
- Associate Editor of "Frontiers in Plant Science" (specialty section "Plant-Pathogen Interactions") (since May 11, 2021)
- Associate Editor of the "Journal of Plant Pathology" (since January 15, 2021)
- Member of the "Technical Table for the Corn Sector" at the Ministry of Agricultural, Food and Forestry Policies (since 2/08/22)
- Member of the Scientific Committee for Area (CSA) 8, subarea 8.4 Plant Pathology and Entomology for the four-year period 2024-2028

Awards

- Winner of the 2005 "Professor Giovanni Scaramuzzi" Award sponsored by the Italian Society of Plant Pathology (SIPAV) for the best PhD thesis
- Intellectual Property Award (IPA) 2021 for the best patent in the "Agri-food Supply Chain" macro-area ("Peptide analogs of the natural peptaibol Trichogin GA IV with phytosanitary activity" by De Zotti M., Favaron F., Sella L.) - Award organized at Expo 2020 in Dubai by the Ministry of Economic Development - General Directorate for the Protection of Industrial Property - Italian Patent and Trademark Office

Research activity

54 scientific articles (h-index 23) published in international peer-reviewed Journals (listed by Web of Science or Scopus), 1 book chapter, 5 short publications in international peer-reviewed Journals, 3 full publications in International Congress Proceedings and 110 Proceedings presented at National and International Conferences or Congresses

Publications in international journals

1. Tundo S., Bolzonello A., Meggio F., Pitacco A., Sella L., Favaron F., Solla A. (2025). Drought, Waterlogging and Co-Infection Influence the Severity of *Coniella granati* and *Phytophthora palmivora* in Pomegranate and the Biocontrol Efficacy of *Bacillus amyloliquefaciens*. *Plant Pathology*, 74(5): 1187–1196. doi.org/10.1111/ppa.14058
2. Bolzonello A., Battisti I., Tundo S., Pais Da Cunha A.T., Marangon M., Vincenzi S., Masi A., Sella L., Poussereau N., Favaron F. (2025). *Botrytis cinerea* protease activity removes the chitin-binding domain of a major grapevine chitinase, abolishing its antifungal activity. *Physiological and Molecular Plant Pathology*, 138: 102651. doi.org/10.1016/j.pmp.2025.102651
3. Baramidze V., Sella L., Japaridze T., Dzotsenidze N., Lamazoshvili D., Abashidze N., Basilidze M., Tomashvili G. (2025). A Barcoded ITS Primer-Based Nanopore Sequencing Protocol for Detection of *Alternaria* spp. in Diverse Plant Hosts. *Journal of Fungi*, 11: 249. doi.org/10.3390/jof11040249
4. Sanna F., Mori N., Santoiemma G., Pozzebon A., Scaccini D., Marangoni F., Sella L.* (2024). *Halyomorpha halys* (Hemiptera: Pentatomidae) as the major contributor to early olive drop in northern Italy. *Journal of Economic Entomology*, 117(4): 1336–1346. DOI: [org/10.1093/jee/toae126](https://doi.org/10.1093/jee/toae126). (*corresponding author)
5. Fodil S., De Zotti M., Tundo S., Gabbatore L., Vettorazzo I., Luti S., Musetti R., Sella L., Favaron F., Baccelli I. (2024). Multiple lysine substitutions in the peptaibol trichogin GA IV enhance the antibiotic activity against plant pathogenic *Pseudomonas syringae*. *Pesticide Biochemistry and Physiology*, 201: 105901. doi.org/10.1016/j.pestbp.2024.105901
6. Baramidze V., Sella L., Japaridze T., Abashidze N., Lamazoshvili D., Dzotsenidze N., Tomashvili G. (2024). Long amplicon Nanopore sequencing of *Botrytis cinerea* and other fungal species present in infected grapevine leaf samples. *Biology Methods & Protocols*, bpad042. doi.org/10.1093/biomethods/bpad042
7. Nguyen H.M., Le L.Q., Sella L., Broadbent L.M., Bill R.M., Vu V.V. (2023). Heterologous expression and characterization of a MoAA16 polysaccharide monooxygenase from the rice blast fungus *Magnaporthe oryzae*. *Electronic Journal of Biotechnology*, 66: 1–16. <https://doi.org/10.1016/j.ejbt.2023.06.002>
8. Bolzonello A., Morbiato L., Tundo S., Sella L., Baccelli I., Echeverrigaray S., Musetti R., De Zotti M., Favaron F. (2023). Peptide analogs of a *Trichoderma* peptaibol effectively control downy mildew in the vineyard. *Plant Disease*, 107:2643-2652. doi.org/10.1094/PDIS-09-22-2064-RE
9. Caracciolo R., Sella L., De Zotti M., Bolzonello A., Armellini M., Trainotti L., Favaron F., Tundo S. (2023). Efficacy of *Trichoderma longibrachiatum* Trichogin GA IV Peptaibol analogs against the Black Rot Pathogen *Xanthomonas campestris* pv. *campestris* and other Phytopathogenic Bacteria. *Microorganisms*, 11(2): 480. Doi: 10.3390/microorganisms11020480
10. Panozzo A., Barion G., Moore S.S., Cobalchin F., Di Stefano A., Sella L., Vamerali T. (2023). Early morphophysiological response of oilseed rape under seed applied Sedaxane fungicide and *Rhizoctonia solani* pressure. *Frontiers in Plant Science* 14: 1130825. doi: 10.3389/fpls.2023.1130825
11. Tundo S., Mandalà G., Sella L., Favaron F., Bedre R., Kalunke R.M. (2022). Xylanase Inhibitors:

- Defense Players in Plant Immunity with Implications in Agro-Industrial Processing. International Journal of Molecular Science, 23: 14994. DOI: 10.3390/ijms232314994
12. Busato I., Bertaiola O., Tundo S., Guamerio C., Lucchetta M., Sella L., Pressi G., Favaron F. (2022). A Phytocomplex Obtained from *Salvia officinalis* by Cell Culture Technology Effectively Controls the Grapevine Downy Mildew Pathogen *Plasmopara viticola*. Plants-Basel, 11 (20): 2675. DOI: 10.3390/plants11202675
 13. Baccelli I., Luti S., Bernardi R., Favaron F., De Zotti M., Sella L. (2022). Water-Soluble Trichogin GA IV-Derived Peptaibols Protect Tomato Plants From *Botrytis cinerea* Infection With Limited Impact on Plant Defenses. Frontiers in Plant Science, 13: 881961. doi: 10.3389/fpls.2022.881961
 14. Lengyel S., Rasclé C., Poussereau N., Bruel C., Sella L.*, Choquer M.*, Favaron F. (2022). Snf1 Kinase Differentially Regulates *Botrytis cinerea* Pathogenicity according to the Plant Host. Microorganisms, 10: 444. doi.org/10.3390/microorganisms10020444 (*corresponding author)
 15. Sella L.*, Govind R., Caracciolo R., Quarantin A., Vu V.V., Tundo S., Nguyen H.M., Favaron F., Musetti R., De Zotti M. (2021). Transcriptomic and ultrastructural analyses of *Pyricularia oryzae* treated with fungicidal peptaibol analogs of Trichoderma trichogin. Frontiers in Microbiology, 12:753202. DOI: 10.3389/fmicb.2021.753202 (*corresponding author)
 16. Tundo S., Paccanaro M.C., Bigini V., Savatin D.V., Faoro F., Favaron F., Sella L.* (2021). The Fusarium graminearum FGSG_03624 xylanase enhances plant immunity and increases resistance against bacterial and fungal pathogens. International Journal of Molecular Sciences, 22(19): 10811. DOI:10.3390/ijms221910811 (*corresponding author)
 17. De Zotti M.^a, Sella L.^a, Bolzonello A., Gabbatore L., Peggion C., Bortolotto A., Elmaghraby I., Tundo S. and Favaron F. (2020). Targeted amino acid substitutions in Trichoderma peptaibol confer activity against fungal plant pathogens and protect host tissues from Botrytis cinerea infection. International Journal of Molecular Sciences, 21: 7521. DOI:10.3390/ijms21207521. (^aAuthors equally contributing to the work)
 18. Echeverrigaray S., Scariot F.J., Fontanella G., Favaron F., Sella L., Santos M.C., Schwambach J., Pedrotti C., Delamare A.P.L. (2020). Colletotrichum species causing grape ripe rot disease in Vitis labrusca and V. vinifera varieties in the highlands of southern Brazil. Plant Pathology, 69: 1504-1512. DOI: dx.doi.org/10.1111/ppa.13240.
 19. Tundo S., Paccanaro M.C., Elmaghraby I., Moschetti I., D'Ovidio R., Favaron F., Sella L.* (2020). The xylanase inhibitor TAXI-I increases plant resistance to Botrytis cinerea by inhibiting the BcXyn11a xylanase necrotizing activity. Plants, 9 (5): 601. DOI:10.3390/plants9050601. (*corresponding author)
 20. Linaldeddu B.T., Bregant C., Montecchio L., Favaron F., Sella L.* (2020). First report of Phytophthora acerina, P. pini and P. plurivora causing root rot and sudden death of olive trees in Italy. Plant Disease, doi: 10.1094/PDIS-10-19-2080-PDN (*corresponding author)
 21. Luti S.*, Sella L.*, Quarantin A., Pazzagli L., Baccelli I. (2020). Twenty years of research on cerato-platanin family proteins: clues, conclusions, and unsolved issues. Fungal Biology Reviews, 34: 13-24. Doi: 10.1016/j.fbr.2019.10.001 (*authors contributing equally to the work)
 22. Quarantin A., Haderl B., Kröger B., Schaefer W., Favaron F., Sella L.*, Martinez-Rocha A.L. (2019). Different hydrophobins of Fusarium graminearum are involved in hyphal growth, attachment, water-air interface penetration and plant infection. Frontiers in Microbiology. DOI: 10.3389/fmicb.2019.00751. (*corresponding author)
 23. Quarantin A., Castiglioni C., Schäfer W., Favaron F., Sella L.* (2019). The Fusarium graminearum cerato-platanins loosen cellulose substrates enhancing fungal cellulase activity as expansin-like proteins. Plant Physiology and Biochemistry, 139: 229–238. DOI: 10.1016/j.plaphy.2019.03.025. (*corresponding author)
 24. Heidari B., Miras M., Maria B., Lucini L., Bolton M., Mcgrath M.J., Broccanello C., Alberti I., Sella L., Concheri G., Squartini A., Cagnin M., Hassani M., Romano A., Stevanato P. (2019). Mass spectrometry-based metabolomic discrimination of Cercospora leaf spot resistant and susceptible sugar beet germplasms. Euphytica 2019. DOI: 10.1007/s10681-019-2351-3.
 25. Zanella A., Ascher-Jenull J., Ponge J.F., Bolzonella C., Banas D., De Nobili M., Fusaro S., Sella L., Giannini R. (2018). Humusica: Soil biodiversity and global change. Bulletin of Geography-Physical Geography Series, 14: 15-36. DOI: 10.2478/bgeo-2018-0002.
 26. Hanson L., De Lucchi C., Stevanato P., McGrath M., Panella L., Sella L., De Biaggi M., Concheri G. (2018). Root rot symptoms in sugar beet lines caused by Fusarium oxysporum f. sp. betae. European Journal of Plant Pathology, 150: 589-593. DOI 10.1007/s10658-017-1302-x.
 27. Dal Cortivo C., Conselvan G.B., Carletti P., Barion G., Sella L., Vamerali T. (2017). Biostimulant Effects of Seed-Applied Sedaxane Fungicide: Morphological and Physiological Changes in Maize Seedlings. Frontiers in Plant Science, 8, 2072. doi: 10.3389/fpls.2017.02072.
 28. Paccanaro M.C., Sella L.*, Castiglioni C., Giacomello F., Martinez-Rocha A.L., D'Ovidio R., Schäfer W., Favaron F. (2017). Synergistic Effect of Different Plant Cell Wall-Degrading Enzymes Is Important for Virulence of Fusarium graminearum. Molecular Plant-Microbe Interactions, 30

- (11): 886-895. (*corresponding author)
29. De Lucchi C., Stevanato P., Hanson L.E., McGrath J.M., Panella L., De Biaggi M., Broccanello C., Bertaggia M., Sella L., Concheri G. (2017). Molecular markers for improving control of soil-borne pathogen *Fusarium oxysporum* in sugar beet. *Euphytica*, 213: 71.
 30. Quarantin A., Glasenapp A., Schäfer W., Favaron F., Sella L.* (2016). Involvement of the *Fusarium graminearum* cerato-platanin proteins in fungal growth and plant infection. *Plant Physiology and Biochemistry*, 109: 220-229. (*corresponding author)
 31. Marcatto R., Sella L., Lucchetta M., Vincenzi S., Odorizzi S., Curioni A., Favaron F. (2016). Necrotrophic fungal plant pathogens display different mechanisms to counteract grape chitinase and thaumatin-like protein. *Physiological and Molecular Plant Pathology*, doi: 10.1016/j.pmpp.2016.09.005.
 32. Sella L.*, Castiglioni C., Paccanaro M.C., Janni M., Schäfer W., D'Ovidio R., Favaron F. (2016). Involvement of fungal pectin methylesterase activity in the interaction between *Fusarium graminearum* and wheat. *Molecular Plant-Microbe Interactions*, 29 (4): 258-267 (doi: 10.1094/MPMI-07-15-0174-R). (*corresponding author)
 33. Sella L.*, Gazzetti K., Castiglioni C., Schäfer W., D'Ovidio R., Favaron F. (2016). The *Fusarium graminearum* Xyr1 transcription factor regulates xylanase expression but is not essential for fungal virulence. *Plant Pathology*, 65 (5): 713-722 (doi: 10.1111/ppa.12456). (*corresponding author)
 34. Tacconi, G., Paltrinieri, S., Mejia, J.F., Fuentealba, S.P., Bertaccini, A., Tosi, L., Giacomini, A., Mazzucchi, U., Favaron, F., Sella, L., Bertaiola, F. (2015). Vine decline in kiwifruit: climate change and effect on waterlogging and *Phytophthora* in North Italy. *Acta Horticulturae*, 1096: 93-98 (doi: 10.17660/ActaHortic.2015.1096.7).
 35. Tundo S., Moschetti I., Faoro F., Lafond M., Giardina T., Favaron F., Sella L.*, D'Ovidio R.* (2015). *Fusarium graminearum* produces different xylanases causing host cell death that is prevented by the xylanase inhibitors XIP-I and TAXI-III in wheat. *Plant Science*, 240: 161-169. (*corresponding author)
 36. Moschetti I., Faoro F., Moro S., Sabbadin D., Sella L., Favaron F., D'Ovidio R. (2015). The xylanase inhibitor TAXI-III counteracts the necrotic activity of a *Fusarium graminearum* xylanase in vitro and in durum wheat transgenic plants. *Molecular Plant Pathology*, 16: 583–592.
 37. Kalunke R.M., Cenci A., Volpi C., O'Sullivan D.M., Sella L., Favaron F., Cervone F., De Lorenzo G., D'Ovidio R. (2014). The pgip family in soybean and three other legume species: evidence for a birth-and-death model of evolution. *BMC Plant Biology*, 14: 189. DOI: 10.1186/s12870-014-0189-3.
 38. Sella L., Gazzetti K., Castiglioni C., Schäfer W., Favaron F. (2014). *Fusarium graminearum* possesses virulence factors common to *Fusarium* head blight of wheat and seedling rot of soybean, but differing in their impact on disease severity. *Phytopathology*, 104: 1201-1207.
 39. Moschetti I., Tundo S., Janni M., Sella L., Gazzetti K., Tauzin A., Giardina T., Masci S., Favaron F., D'Ovidio R. (2013). Constitutive expression of the xylanase inhibitor TAXI-III delays *Fusarium* Head Blight symptoms in durum wheat transgenic plants. *Molecular Plant-Microbe Interactions*, 26: 1464-1472.
 40. Sella L.*, Gazzetti K., Faoro F., Odorizzi S., D'Ovidio R., Schäfer W., Favaron F. (2013). A *Fusarium graminearum* xylanase expressed during wheat infection is a necrotizing factor but is not essential for virulence. *Plant Physiology and Biochemistry*, 64: 1-10. (*corresponding author)
 41. Scattolin L., Dal Maso E., Mutto Accordi S., Sella L., Montecchio L. (2012). Detecting asymptomatic ink-diseased chestnut trees by the composition of the ectomycorrhizal community. *Forest Pathology*, 42: 501–509.
 42. Ferrari S.a, Sella L.a, Janni M.a, De Lorenzo G., Favaron F., D'Ovidio R. (2012). Transgenic expression of Polygalacturonase-Inhibiting Proteins in *Arabidopsis* and wheat increases resistance to the flower pathogen *Fusarium graminearum*. *Plant Biology*, 14 (Supplement 1): 31-38. (a Authors equally contributing to the work).
 43. Kalunke R.M., Janni M., Sella L., David P., Geffroy V., Favaron F., D'Ovidio R. (2011). Transcript analysis of the bean polygalacturonase inhibiting protein gene family reveals that Pvpqip2 is expressed in the whole plant and is strongly induced by pathogen infection. *Journal of Plant Pathology*, 93: 141-148.
 44. Sella L., Cosmi T., Giacomello F., Saccardi A., Favaron F. (2010). First report of *Fusarium oxysporum* on *Dipladenia* sp. in Italy. *Journal of Plant Pathology*, 92: 543-543.
 45. Favaron F., Lucchetta M., Odorizzi S., Da Cunha A.T.P. and Sella L. (2009). The role of grape polyphenols on trans-resveratrol activity against *Botrytis cinerea* and of fungal laccase on the solubility of putative grape PR proteins. *Journal of Plant Pathology*, 91: 579-588.
 46. Tomassini A., Sella L., Raiola A., D'Ovidio R. and Favaron F. (2009). Characterization and expression of *Fusarium graminearum* endo-polygalacturonases in vitro and during wheat infection. *Plant Pathology*, 58: 556-564.
 47. Janni M., Sella L., Favaron F., Blechl A.E., De Lorenzo G., D'Ovidio R. (2008). The expression of a

- bean PGIP in transgenic wheat confers increased resistance to the fungal pathogen *Bipolaris sorokiniana*. *Molecular Plant-Microbe Interactions*, 21: 171-177.
48. Raiola A., Sella L., Castiglioni C., Balmas V., Favaron F. (2008). A single amino acid substitution in highly similar endo-PGs from *Fusarium verticillioides* and related *Fusarium* species affects PGIP inhibition. *Fungal Genetics and Biology*, 45:776-789.
 49. Mosca E., Montecchio L., Sella L., Garbaye J. (2007). Short-term effect of removing tree competition on the ectomycorrhizal status of a declining pedunculate oak forest (*Quercus robur* L.). *Forest Ecology and Management*, 244: 129-140.
 50. D'Ovidio R., Roberti S., Di Giovanni M., Capodicasa C., Melaragni M., Sella L., Tosi P., Favaron F. (2006). The characterization of the soybean polygalacturonase inhibiting proteins (Pgip) gene family reveals that a single member is responsible for the activity detected in soybean tissue. *Planta*, 224: 633-645.
 51. Sella L., Tomassini A., D'Ovidio R., Favaron F. (2005). Expression of two *Sclerotinia sclerotiorum* endo-pg genes correlates with endo-polygalacturonase activity during *Glycine max* infection. *Journal of Plant Pathology*, 87: 199-205.
 52. Zuppini A., Navazio L., Sella L., Castiglioni C., Favaron F., Mariani P. (2005). An endopolygalacturonase from *Sclerotinia sclerotiorum* induces a Ca²⁺-mediated signalling and programmed cell death in soybean cells. *Molecular Plant-Microbe Interactions*, 18: 849-855.
 53. Sella L., Castiglioni C., Roberti S., D'Ovidio R., Favaron F. (2004). An endo-polygalacturonase (PG) of *Fusarium moniliforme* escaping inhibition by plant polygalacturonase-inhibiting proteins (PGIPs) provides new insights into the PG-PGIP interaction. *FEMS Microbiology Letters*, 240: 117-124.
 54. Favaron F., Sella L., D'Ovidio R. (2004). Relationships among endo-polygalacturonase, oxalate, pH and plant polygalacturonase-inhibiting protein (PGIP) in the interaction between *Sclerotinia sclerotiorum* and soybean. *Molecular Plant-Microbe Interactions*, 17: 1402-1419.

Book chapters

1. Sella L., V.V. Vu, A. Quarantin, R. Caracciolo, R. Govind, A. Bolzonello, S. Tundo, M. De Zotti, F. Favaron, H.D. Nguyen, Q.L. Le, T.T. Nguyen, L.T. Do, H.M. Nguyen (2021). Sustainable methods to control *Pyricularia oryzae*, the causal agent of rice blast disease. In: Anderle M. (eds) *Innovations in Land, Water and Energy for Vietnam's Sustainable Development*, pp 67-82. UNIPA Springer Series. Springer, Cham. https://doi.org/10.1007/978-3-030-51260-6_7. First Online: 29 November 2020. Print ISBN: 978-3-030-51259-0. Online ISBN: 978-3-030-51260-6.

Short publications in international journals

1. Sella L., Favaron F., Ricci A., Toplak A., De Zotti M., Dalla Torre C. (2024). Enzymatic approaches to the synthesis of Aib-containing peptides for phytosanitary applications. *Journal of Peptide Science*, 30 (Supplement 2), Meeting Abstract ID: 970-P2
2. Mattellone A., De Zotti M., Baccelli I., Sihem F., Luti S., Tundo S., Musetti R., Sella L., Favaron F. (2024). Multiple lysine substitutions in the peptaibol trichogin GA IV enhance the antibiotic activity against plant pathogenic *Pseudomonas syringae*, *Journal of Peptide Science*, 30 (Supplement 2), Meeting Abstract ID: 809-P2
3. De Zotti M., Sella L., Formaggio F., Favaron F. (2018). Peptide-Based Biopesticides. Meeting Abstract: OP5. *Journal of Peptide Science*, 24: S49.
4. De Zotti M., Sella L., Quarantin A., Castiglioni C., Bolzonello A., Favaron F., Picco A.M., Govind R., Tundo S., Odorizzi S., Le T.D., Vu V.V., Nguyen M.H. (2018). Novel peptide-based control measures against the rice fungal pathogen *Pyricularia oryzae*. Meeting Abstract: P178. *Journal of Peptide Science*, 24: S144.
5. Sella L. (2005). Fungal pathogens can elude the inhibition by host plant polygalacturonase inhibiting proteins (PGIPs) by different mechanisms. *Journal of Plant Pathology*, 87 (special issue 4): 265.

Full publications in conference proceedings

1. Tacconi G., Tosi L., Giacomini A., Mazzucchi U., Favaron F., Sella L., Bertaiola F., Mejia J.F., Paltrinieri S., Fuentealba S.P., Bertaccini A. (2014). Moria dell'actinidia nel veronese: anomalie climatiche, struttura del terreno e ruolo dei patogeni. Convegno della Società di Ortoflorofrutticoltura Italiana (SOI). Latina, 25-11-2014.
2. D'Ovidio R., Roberti S., Melaragni M., Capodicasa C., Sella L., Favaron F. (2002). Characterization of two closely linked soybean pgip genes and transcript regulation following pathogen infection and wounding. *Proceedings of 6th Congress of the European Foundation for Plant Pathology. Plant Protection Science*, 38 (Special issue 2): 480-482.
3. Favaron F., D'Ovidio R., Melaragni M., Sella L., Destro T. (2000). PGIP activities and PGIP gene family structure in soybean and leek. *Proceedings of the 5th Congress of the European Foundation for Plant Pathology*, pp. 346-348.

Publications at national and

- Sella L., Vu V.V. (2017). Exploiting Rice Blast Fungus Enzymes for Practical Applications in Plant

international conferences

Disease Control and Biomass Conversion. 1st Italy Vietnam Conference on Science and Technology Bilateral Research Experiences and Projects: Results and Perspectives. Hanoi (Vietnam), 21 November 2017.

- Moschetti I., Sella L., Faoro F., Moro S., Favaron F. and D'Ovidio R. (2014). The wheat xylanase inhibitor TAXI-III interacts with a xylanase secreted by *Fusarium graminearum* and limits wheat cell death. XX National Meeting of the Italian Society for Plant Pathology (SIPAV). Pisa, 22-24 settembre 2014

- Sella L., Rocchi V., Castiglioni C., Schäfer W., D'Ovidio R., Favaron F. (2010). Involvement of fungal pectin methylesterase activity in the interaction between *Fusarium graminearum* and wheat. XVI National Meeting of the Italian Society for Plant Pathology (SIPAV). Firenze, 14-17 settembre 2010

- Sella L., Giacomello F., Schäfer W. and Favaron F. (2009). A *Fusarium graminearum* polygalacturonase gene is required for full virulence during wheat infection. XV National meeting of the Italian Society for Plant Pathology (SIPAV). Locorotondo (BA), 28 september - 1 october 2009

- Sella L., Roberti S., Di Giovanni M., Favaron F., D'Ovidio R. (2004). The soybean PGIP family contains members with different inhibiting properties and regulation following *Sclerotinia sclerotiorum* infection. SIFV-SIGA Joint Congress. Lecce, 15-18 september 2004

Publications at conferences
Third Mission Activities

- Sella L. (2025). Glomerella Leaf Spot: Initial monitoring results in Veneto. Conference "Glomerella New Apple Emergence: Diffusion and Current Knowledge" organized by the Phytosanitary Service of the Emilia-Romagna Region. Bologna, 16-01-2025.

- Sella L. (2023). Chemical and agronomic control of the causal agent of pear brown spot, *Stemphylium vesicarium*: report on activities carried out in the three-year period 2021-2023. Conference "Emergencies of Pear Cultivation in Veneto: Decay and Spotting" organized by the Northeast Agricultural Consortium, Coldiretti Verona, and the Italian Agricultural Consortiums. Castagnaro (VR), 5-12-2023.

Projects

- "Fungal pathogens of fruit and nut crops: identification and field trials." Funding body: Veneto Region. Duration: April 2025 to December 2025. Role: Principal Investigator. Amount: €145,000

- "Fungal pathogens of apple and pear trees in Veneto: identification of *Colletotrichum* and/or *Glomerella* spp. species involved in apple leaf spot and bitter rot and field efficacy trials of plant protection products against *Stemphylium vesicarium*, the causal agent of pear brown spot." Funding body: Veneto Region. Duration: July 2024 to March 2025. Role: Principal Investigator. Amount: €20,000

- "Peptides: synthesis and agricultural applications". Funding body: University of Padua (call for proposals "Shaping a World-Class University" – 2024 – project type: Short-term Visiting Professors). Role: Principal Investigator. Funding amount: €2,500

- "Peptide biomolecules with phytosanitary action: efficacy in crop protection in the Veneto region and effect on off-target organisms". Funding body: Veneto Region (PR VENETO FSE+ 2021-2027). Duration: March 2024 to February 2025. Role: Principal Investigator. Funding amount: €105,660

- "Efficacy of synthetic and BCA-based plant protection products against *Stemphylium vesicarium*, the causal agent of pear brown spot." Funding body: Veneto Region. Duration: July 2023 to May 2024. Role: Principal Investigator. Amount: €15,000

- "Research project on the causal agent of pear brown spot - *Stemphylium vesicarium* - and its chemical and agronomic control." Funding body: Veneto Region. Duration: January 2021 to December 2022. Role: Principal Investigator. Amount: €32,000

- "Phytosanitary monitoring and laboratory analyses aimed at identifying the causative agents of a new and emerging olive disease in Veneto and developing effective intervention strategies to halt the degradation of affected areas and promote the productive recovery of the plants." Funding body: Veneto Region. Duration: November 2020 to January 2021. Role: Principal Investigator. Amount: €20,000

- PRIN 2017: "Small RNAs and Peptides for controlling diseases and development in horticultural plants." Role: Research team member

- "Use of natural peptides for the sustainable protection of crops relevant to the Veneto fruit and vegetable sector." Funding body: Veneto Region (POR-FSE 2014-2020). Duration: October 2018 to September 2019. Role: Principal Investigator. Amount: €58,500

- "Phytosanitary monitoring and laboratory analyses aimed at identifying the causative agents responsible for a new and emerging olive disease in Veneto and developing effective intervention strategies to halt the degradation of affected areas and promote the recovery of plant production." Funding body: Veneto Region. Duration: November 2018 to January 2019. Role: Principal Investigator. Amount: €30,000

- "Phytosanitary monitoring and laboratory analyses aimed at determining the presence of harmful organisms in olive trees." Funding body: Veneto Region. Duration: August-November 2018. Role:

Principal Investigator. Amount: €10,000

- ITALY – VIETNAM SCIENCE AND TECHNOLOGY COOPERATION: "Characterization of some industrially relevant polysaccharide monooxygenases and related enzymes." Funding body: Ministry of Foreign Affairs and International Cooperation (MAECI). Duration: January 2017 to December 2019. Role: Principal Investigator. Amount: €50,000

- Progetto di Ateneo 2010: "Applications of enzymes from phytopathogenic fungi for improving the winemaking process." Funding body: University of Padova. Duration: January 2011 to December 2012. Role: Principal Investigator. Amount: €38,048

- "VIGONI PROGRAM 2009" (Researcher exchange program between Italian and German universities): "Detection of new virulence factors in the toxinogenic fungus *Fusarium graminearum*, a pathogen of cereal crops." Role: Research team member

- PRIN 2006: "Study of basal and induced resistance to fungal pathogens in grapevine by large-scale proteome analysis." Role: Unit Manager

- PRIN 2005: "Fungal diseases of wheat spikes: mechanisms of pathogenesis and defense." Role: Research team member

Collaboration with Companies

- Phytopathological diagnostic analysis on walnut samples – Agrea S.r.l. (2015)

- Pathogenicity tests on basil lines with the pathogenic fungus *Botrytis cinerea* – Blumen Group S.p.a. (2017)

- Molecular analyses on corn plants to quantify contamination by mycotoxigenic fungi – Syngenta Group (2017-2018)

- Collaboration with Particular Materials S.r.l. to evaluate the efficacy of copper nanoparticles against downy mildew on grapevines (2019-2024)

- Collaboration with Sipcam Oxon S.p.a. to evaluate the efficacy of antimicrobial peptides against grapevine pathogens (2019-2021)

- Phytopathological diagnostic analysis of walnut samples - Il Noceto Soc. Coop. Agricola (2020-2021)

Patents

- Patent No. 102018000006817: Peptide analogues of the natural peptaibol trichogin GA IV with phytosanitary activity. Issue date: July 14, 2020.

- Patent No. 102021000005057: Peptides with phytosanitary action. Submission date: March 4, 2021.

Personal data

The undersigned authorizes the processing of my personal data contained in this CV, drafted in Europass format, pursuant to Article 13 of Legislative Decree No. 196/2003 (Personal Data Protection Code), EU Regulation No. 679/2016, and applicable privacy legislation.

The undersigned, aware of the criminal liability provided for by Article 76 of Presidential Decree 445/2000 for false documents and false declarations indicated therein, declares that the information provided in this CV in European format is true.

Legnaro, 27/07/2025

