Vojislava Grbic

Department of Biology, University of Western, Ontario, Western Science Building, London, Ontario, N6A 5B7, Canada

Education:

Degree	University	Department	Year	
PhD	Univ. of Wisconsin	Genetics	1994	
MSc	Univ. of Novi Sad	Plant Genetics	1989	
BS	Univ. of Novi Sad	Plant Breeding		1986

Employment history:

Date	Rank and Position	Department	Institution
2011	Visiting Professor	ICVV	CSIC, Spain
2004	Visiting Professor	Dev. Biology	MPI, Germany
2022-current	Professor	Biology	UWO
2003-2022	Associate Professor	Biology	UWO
1996-2003	Assistant Professor	Plant Sciences	UWO
1996-1998	EMBO Postdoctoral Fellow	Plant Sciences	U of Cambridge, UK
1994-1996	Postdoctoral Fellow	Genetics	U of Wisconsin, USA

Honours and awards:

- The Japan Society for the Promotion of Science (JSPS) Fellowship, 2023-2025
- Associate Editor for Frontiers in Ecology and Evolution, 2022-
- Academic Editor for Insects, 2021-
- Vanguard Award, Western, 2020
- The Japan Society for the Promotion of Science (JSPS) Fellowship, 2019
- OECD Research Fellowship, 2018
- Guest Associate Editor for Plant Microbe Interactions, Frontiers in Microbiology and Frontiers in Plant Science, 2017 2018
- Review Editor for Agroecology and Land Use Systems, Frontiers in Plant Science, Frontiers in Ecology and Evolution, and Frontiers in Environmental Science, 2017-
- Frontiers Topic Editor, Plant Responses to Phytophagous Mites/Thrips and Search for Resistance, 2017/2018
- Vanguard Award, Western, 2015
- OECD Research Fellowship, 2012
- International Outgoing Fellowships for career development (IOF) Marie Curie Actions, 2010
- DAAD, German academic research fellowship, 2004
- Best Mentor Award at 61st Annual Meeting of Society for Developmental Biology, Madison, USA, July 21-25, 2002
- European Molecular Biology Organisation (EMBO) postdoctoral fellowship, international, 1996-1998
- Travel award, 7th International Research Conference on Arabidopsis Research at Norwich, UK, 1996
- Poster award, 53rd Annual Symposium of Society for Developmental Biology, USA, 1994
- COCHRAN fellowship, USDA, USA, 1989

RESEARCH

Google Scholar Profile at https://scholar.google.com/citations?user=tETkUPAAAAAJ Career citation count = 5162, h-index=32, i10index = 47.

Details of Contributions to Publications: In my group, the first author(s) makes significant contributions to study, performs the majority of data collection and analysis. Subsequent authors appear in descending order of contribution, with the exception of the last author. As the last and senior author, I contribute to generation of hypotheses and study design, guide the data collection and analysis, and obtain funding and other support for the work. Contributions where I am the last (i.e., senior) author represent studies performed by my trainees; their names (graduate students and *post-docs*) that I supervised are in **bold** and *bold-italic* types. In these papers, I conceived, designed and supervised the study, and I wrote the manuscript with inputs from all authors. The role of my lab to collaborative work is described in detail below.

Refereed Publications:

a) Published papers

60. **Maglov J, Feng MY, Lin D, Barkhouse K, Alexander A,** Grbic M, *Zhurov V,* Grbic V, Tudzarova S. (2023) A link between energy metabolism and plant host adaptation states in the two-spotted spider mite, *Tetranychus urticae* (Koch). **Sci Rep.** 13(1):19343. doi: 10.1038/s41598-023-46589-9.

This manuscript represents cumulative results of 4th-year projects of five **undergraduate students** Maglov J, Feng MY, Lin D, Barkhouse K, Alexander A whom I have supervised. The work was performed in collaboration with Dr. Tudzarova from UCLA – USA.

59. Arriaza RH, Abiskaroon B, Patel M, Daneshian L, Kluza A, Snoeck S, Watkins MB, Hopkins J, Van Leeuwen T, Grbic M, **Grbic V**, Borowski T, Chruszcz M. (2023) Structural and functional studies reveal the molecular basis of substrate promiscuity of a glycosyltransferase originating from a major agricultural pest. **J Biol Chem**:105421. doi: 10.1016/j.jbc.2023.105421.

In this collaborative work I helped in conceiving the study and contributed to writing the manuscript.

58. Arnaiz A, Romero-Puertas MC, Santamaria ME, Rosa-Diaz I, Arbona V, Muñoz A, **Grbic V**, González-Melendi P, Castellano MM, Sandalio LM, Martinez M, Diaz I (2023) The Arabidopsis thioredoxin TRXh5 regulates the S-nitrosylation pattern of the TIRK receptor being both proteins essential in the modulation of defences to *Tetranychus urticae*. **Redox Biology**, in press.

In this collaborative work I helped in conceiving the study and contributed to writing the manuscript.

57. *Bruinsma K, Rioja C, Zhurov V,* Santamaria ME, Arbona V, *Navarro M, Cazaux M,* Auger P, Migeon A, Wybouw N, Van Leeuwen T, Diaz I, Gómez-Cadenas A, Grbic M, Navajas M, **Grbic V.** (2023) Host-adaptation and specialization in Tetranychidae mites. **Plant Physiol.** 2023 Jul 12:kiad412. doi: 10.1093/plphys/kiad412.

K.B., C.R., V.Z., M.E.S., I.D., M.G., and V.G. conceived the research plans. I.D., M.Ns., and V.G. supervised the experiments. K.B. and C.R. performed experiments on T. urticae and T. evansi. Samples for microarray assays were prepared by M.No., M.C., P.A., A.M., N.W., T.V.L., M.Ns., and V.G. V.Z. analyzed microarray data. K.B. and M.E.S. analyzed protease inhibitor and cathepsin L activities. V.A. and G.C.A. performed hormonal analysis. K.B., V.Z., and V.G. wrote the manuscript. All authors approved the manuscript. M.G. and V.G. contributed resources and equipment.

56. Kader S, Arriaza RH, Khatri K, O'Malley A, **Grbic V**, Grbic M, Chruszcz M (2023) Current status of structural studies of proteins originating from Arachnida. **Systematic and Applied Acarology, 28(2)**:298-308. <u>https://doi.org/10.11158/saa.28.2.12</u>

In this collaborative work I helped in conceiving the study and contributed to writing the manuscript.

55. Bensoussan N, Milojevic M, Bruinsma K, Dixit S, Pham S, Singh V, Zhurov V, Grbić M, Grbić V. (2022) Localized efficacy of environmental RNAi in Tetranychus urticae. Scientific Reports 12(1):14791. doi: 10.1038/s41598-022-19231-3.

N.B., V.Z., M.G. and V.G. conceived and planned the study. N.B., M.M., K.B., S.D., S.P., and V.S., performed experimental procedures and collected data. N.B., V.Z., K.B., M.G. and V.G. performed analysis and wrote the manuscript.

54. Arnaiz A, Santamaria ME, Rosa-Diaz I, García I, *Dixit S,* Vallejos S, Gotor C, Martinez M, <u>Grbic V</u>, Diaz I (2022) The hydroxynitrile lyase defends Arabidopsis against *Tetranychus urticae*. **Plant Physiology**, 189(4):2244-2258. doi: 10.1093/plphys/kiac170.

In this collaborative work V.G. and S.D. conceived part of the research plan; I helped in conceiving the study and contributed to writing the manuscript.

53. *Dixit S, Widemann E, Bensoussan N,* Salehipourshirazi G, *Bruinsma K, Milojevic M, Shukla A*, Romero LC, *Zhurov V*, Chruszcz M, Grbić M, <u>Grbić V</u> (2022) □-cyanoalanine synthase protects mites against Arabidopsis defenses. **Plant Physiology**, 189(4):1961-1975. doi: 10.1093/plphys/kiac147.

V.G. and S.D. conceived the research plans; V.G. supervised the experiments; S.D., with the help of E.W., N.B. and A.S. performed all experiments testing the requirement of TuCAS; G.S. prepared samples for RNASeq analysis that was performed by V.Z.; K.B. and L.R. prepared samples and analyzed cyanide levels in Arabidopsis plants; M.M. and N.B. performed in situ localization of TuCAS; S.D., V.Z., K.B. and V.G. analyzed the data; all authors contributed to preparation of the manuscript; L.R., M.C., M.G. and V.G. contributed resources and equipment; V.G. is the author responsible for contact and communication.

52. Daneshian L, Renggli I, Hanaway R, Offermann LR, Schlachter CR, Hernandez Arriaza R, Henry S, Prakash R, Wybouw N, Dermauw W, Shimizu LS, Van Leeuwen T, Makris TM, <u>Grbic</u> <u>V</u>, Grbic M, Chruszcz M. (2022) Structural and functional characterization of β -cyanoalanine synthase from *Tetranychus urticae*. **Insect Biochem Mol Biol**. 142:103722. doi: 10.1016/j.ibmb.2022.103722.

In this collaborative work I helped in conceiving the study and contributed to writing the manuscript.

51. **Bruinsma K, Salehipourshirazi G, Zhurov V,** Dagher F, Grbic M, <u>Grbic V</u> (2021) Effect of Neo-Boost pesticide on mortality and development of different life stages of two-spotted spider mite, *Tetranychus urticae;* Frontiers in Agronomy 3:701974. doi: 10.3389/fagro.2021.701974

B.K., S.G. did experiments. Z.V. helped with data analysis. I conceived the study, supervised experiments and data analysis, and wrote the manuscript with help of BK. In this collaborative work, D.F. and G.M. contributed co-funding. This is an example of the industrial collaboration with D.F. from Agri-Neo. B.K. and V.G. are authors responsible for contact and communication.

50. Salehipourshirazi G, Bruinsma K, Ratlamwala H, *Dixit S*, Arbona V, *Widemann E, Milojevic M*, Jin P, Bensoussan N, Gomez- Cadenas A, *Zhurov V*, Grbic M, <u>Grbic V</u> (2021) Rapid specialization of counter defenses enables two-spotted spider mite to adapt to novel plant hosts; Plant Physiology 187: 2608-2622. doi: 10.1093/plphys/kiab412.

S.G., B.K., R.H., D.S., W.E., M.M., J.P., B.N. did experiments. Z.V. helped with data analysis. I conceived the study, supervised experiments and data analysis, and wrote the manuscript. In

this collaborative work, A.V. and G.C.A. contributed hormonal measurements and G.M. contributed co-funding.

49. Daneshian L, Schlachter C, Fernando Saraiva Macedo Timmers L, Taylor Radford T, Kapingidza B, Dias T, Liese J, Antonio Sperotto R, <u>Grbic V</u>, Grbic M, Chruszcz M (2021) Delta class glutathione S-transferase (TuGSTd01) from the two-spotted spider mite *Tetranychus urticae* is inhibited by abamectin, **Pesticide Biochemistry and Physiology** 176:104873.

In this collaborative work I helped in conceiving the study and contributed to writing the manuscript.

48. *Widemann E, Bruinsma K, Walshe-Roussel B, Saha R*, Letwin D, *Zhurov V*, Bernards M, Grbic M, and <u>Grbic V</u> (2021) Multiple indole glucosinolates and myrosinases defend Arabidopsis against *Tetranychus urticae* herbivory. **Plant Physiology** 187: 116–132.

W.E., B.K., WR.B., S.R. and L.D. did experiments. Z.V. helped with data analysis. I conceived the study, supervised experiments and data analysis, and together with E.W. wrote the manuscript. M.B. and M.G. contributed equipment and co-funding.

47. *Bensoussan N, Dixit S*, Tabara M, Letwin D, *Milojevic M,* Antonacci M, Jin P, Arai Y, *Bruinsma K*, Suzuki T, Fukuhara T, *Zhurov V*, Geibel S, Nauen R, Grbic M, <u>Grbic V</u> (2020) Environmental RNA interference in two-spotted spider mite, Tetranychus urticae, reveals dsRNA processing requirements for efficient RNAi response. <u>Scientific Reports</u> 10(1):19126. doi: 10.1038/s41598-020-75682-6.

B.N., D.S., L.D., M.M., A.M. and J.P. did experiments. B.K. and Z.V. helped with data analysis. I supervised experiments and data analysis, and wrote the manuscript. T.M., A.Y., S.T. and F.T. performed a dicer assay. G.S. and N.R. are private sector collaborators from Bayer CropScience, who helped with M.G. to conceive the study.

46. Lozano-Pérez AA, Pagán A, **Zhurov V**, Hudson SD, Hutter JL, Pruneri V, Pérez-Moreno I, <u>**Grbic V**</u>, Cenis JL, Grbic M, Aznar-Cervantes S. (2020) The silk of gorse spider mite *Tetranychus lintearius* represents a novel natural source of nanoparticles and biomaterials.

Scientific Reports 10(1):18471. doi: 10.1038/s41598-020-74766-7.

In this collaborative work I helped in sample preparation and contributed to writing the manuscript. Z.V. performed some of the experiments.

45. **Namin HH, Zhurov V, Spenler J**, Grbić M, <u>**Grbić V**</u>, Scott IM. (2020) Resistance to pyridaben in Canadian greenhouse populations of two-spotted spider mites, *Tetranychus urticae* (Koch). **Pesticide Biochemistry and Physiology** 170:104677. doi: 10.1016/j.pestbp.2020.104677.

In this collaborative work, I.S. and me co-supervised the graduate student N.H.H. I helped in study design, data analysis and contributed to writing the manuscript. N.H.H, Z.V. and S.J. performed the experiments.

44. Ghazy NA, Okamura M, Sai K, Yamakawa S, Hamdi FA, <u>**Grbic V**</u> and Suzuki T (2020) A Leaf-Mimicking Method for Oral Delivery of Bioactive Substances into Sucking Arthropod Herbivores. **Frontiers in Plant Science** 11:1218. doi: 10.3389/fpls.2020.01218

In this collaborative work I helped in conceiving the study and contributed to writing the manuscript.

43. Arnaiz A, Martinez M, Gonzalez-Melendi P, <u>Grbic V</u>, Diaz I, Santamaria ME. (2019) Plant Defenses Against Pests Driven by a Bidirectional Promoter. **Frontiers in Plant Science_10**:930. doi: 10.3389/fpls.2019.00930.

In this collaborative work I helped in conceiving the study and contributed to writing the manuscript.

42. Sperotto RA, <u>**Grbic V**</u>, Pappas ML, Leiss KA, Kant MR, Wilson CR, Santamaria ME, Gao Y. (2019) Editorial: Plant Responses to Phytophagous Mites/Thrips. **Frontiers in Plant Science** 10:866. doi: 10.3389/fpls.2019.00866.

This was a joint editorial contribution to the special topics in Frontiers in Plant Science.

41. Santamaría ME, Martínez M, Arnaiz A, Rioja C, Burow M, <u>Grbic V</u>, Díaz I. (2019) An Arabidopsis TIR-Lectin Two-Domain Protein Confers Defense Properties against *Tetranychus urticae*. **Plant Physiology** 179(4):1298-1314. doi: 10.1104/pp.18.00951.

In this collaborative work I helped in conceiving the study and contributed to writing the manuscript.

40. Schlachter CR, Daneshian L, Amaya J, Klapper V, Wybouw N, Borowski T, Van Leeuwen T, <u>**Grbic V**</u>, Grbic M, Makris TM, Chruszcz M. (2019) Structural and functional characterization of an intradiol ring-cleavage dioxygenase from the polyphagous spider mite *Tetranychus urticae* Koch. **Insect Biochemistry and Molecular Biology** pii: S0965-1748(18)30364-3. doi: 10.1016/j.ibmb.2018.12.001.

In this collaborative work I helped in conceiving the study and contributed to writing the manuscript.

39. **Bensoussan N**, *Zhurov V*, Yamakawa S, O'Neil CH, Suzuki T, Grbic M and <u>Grbic V</u> (2018) The Digestive System of the Two-Spotted Spider Mite, *Tetranychus urticae* Koch, in the Context of the Mite-Plant Interaction. **Frontiers in Plant Science** 9:1206. doi: 10.3389/fpls.2018.01206

This is primarily work done by B.N. with some help in microscopy by Z.V. In this collaborative work Y.S. and S.T. contributed reagents, O.C.H. helped with histology, and M.G. contributed cofunding. I conceived the study, supervised experiments and data analysis, and wrote the manuscript.

38. Santamaría ME, Arnaiz A, Velasco-Arroyo B, <u>Grbic V</u>, Diaz I, Martinez M. (2018) Arabidopsis response to the spider mite Tetranychus urticae depends on the regulation of reactive oxygen species homeostasis. **Scientific Reports** 21;8(1):9432. doi: 10.1038/s41598-018-27904-1. PMID:29930298

In this collaborative work I helped in conceiving the study and contributed to writing the manuscript.

37. *Rioja C, Zhurov V*, Bruinsma K, Grbic M, <u>Grbic V</u> (2017) Plant-herbivore interactions: a case of an extreme generalist, the two-spotted spider mite, *Tetranychus urticae*. **Molecular Plant-Microbe Interactions**, doi: 10.1094/MPMI-07-17-0168-CR.

This is the review article. R.C. and me wrote the review with help from Z.V., B.K. and G.M.

36. *Suzuki T, Nunes MA, España MU,* Namin HH, Jin P, Bensoussan N, *Zhurov V, Rahman T,* De Clercq R, Hilson P, <u>Grbic V</u>, Grbic M. (2017) RNAi-based reverse genetics in the chelicerate model *Tetranychus urticae*: A comparative analysis of five methods for gene silencing. **PLoS One** 12(7):e0180654.

S.T., N.MA., E.MU., N.HH., J.P., B.N. and R.T. performed experiments. DeC.R. and H.P. helped with generation of transgenic Arabidopsis plants expressing a dsRNA construct targeting TuVATPase. I have co-supervised the study and wrote the manuscript with G.M.

35. *Suzuki T, España MU, Nunes MA, Zhurov V*, Dermauw W, Osakabe M, Van Leeuwen T, Grbic M, <u>Grbic V</u>. (2017) Protocols for the delivery of small molecules to the two-spotted spider mite, *Tetranychus urticae*. **PLoS One** 12(7):e0180658.

S.T., N.MA., E.MU., N.HH. and Z.V. performed experiments. In this collaborative work D.W., O.M. and V.L.T. contributed some procedures for mite preparation that were included in protocols for the delivery of small molecules to the two-spotted spider mite. I have co-supervised the study and wrote the manuscript with G.M.

34. M. Estrella Santamaria, Manuel Martinez, Ana Arnaiz, Felix Ortego, <u>Vojislava Grbic</u>, Isabel Diaz (2017) MATI, a novel protein involved in the regulation of herbivore-associated signalling pathways. **Frontiers in Plant Science** 8:975.

In this collaborative work I helped in conceiving the study and contributed to writing the manuscript.

33. Arthur LL, Chung JJ, *Janakirama P*, Keefer KM, Kolotilin I, Pavlovic-Djuranovic S, Chalker DL, <u>Grbic V</u>, Green R, Menassa R, True HL, Skeath JB, Djuranovic S. (2017) Rapid generation of hypomorphic mutations. **Nature Communications** 8:14705.

In this collaborative work, J.P. and I contributed the work on plants. J.P. did experiments.

32. **Bensoussan N**, Santamaria ME, *Zhurov V*, Diaz I, Grbić M and <u>Grbić V</u> (2016) Plant-Herbivore Interaction: Dissection of the Cellular Pattern of *Tetranychus urticae* Feeding on the Host Plant. **Frontiers in Plant Science** 7:1105.

In this collaborative work, N.B. did all experiments. V.Z. helped with microscopy. S.M.E. and D.I. contributed to experimental design. G.M. contributed co-funding.

31. Sahni S, Prasad BD, Liu Q, <u>**Grbic V**</u>, Sharpe A, Singh SP, Krishna P (2016) Overexpression of the brassinosteroid biosynthetic gene DWF4 in *Brassica napus* simultaneously increases seed yield and stress tolerance. **Scientific Reports** 21; 6:28298.

In this collaborative work, I contributed the data analysis and manuscript writing.

30. *Díaz-Riquelme J, Zhurov V, Rioja C*, Pérez-Moreno I, Torres-Pérez R, Grimplet J, Carbonell-Bejerano P, Bajda S, Van Leeuwen T, Martínez-Zapater JM, Grbic M, <u>Grbic V</u>. (2016) Comparative genome-wide transcriptome analysis of *Vitis vinifera* responses to adapted and non-adapted strains of two-spotted spider mite, *Tetranyhus urticae*. **BMC Genomics** 22;17(1):74.

In this collaborative work, J.D.R. and C.R. performed the experiments. J.D.R. developed grapevine propagation method. I.P.M. collected Murcia mite population and have developed and maintained an inbred line. S.B. and T.V.L. developed London inbred line. V.Z., R.T.P., J.G., P.C.B. and V.G. analysed data. V.G., M.G. and J.M.Z. conceived the study and participated in its design. V.Z. and V.G. drafted the manuscript. V.G. and M.G. are accountable for all aspects of the work. All authors read, revised and approved the final manuscript.

29. Wybouw N*, *Zhurov V*, Martel C,* Bruinsma KA, Hendrickx F, <u>Grbic V</u>, Van Leeuwen T. (2015) Adaptation of a polyphagous herbivore to a novel host plant extensively shapes the transcriptome of herbivore and host. **Molecular Ecology** 24(18):4647-63.

In this collaborative work, my group did all the work on tomato side of mite-tomato interaction. W.N. and Z.V. are shared first authors. M.C. and B.K.A. contributed to experiments. H.F. contributed to manuscript writing. V.L.T. conceived the study and he is the corresponding author. I designed, supervised, participated in data analysis and wrote with Z.V.'s help our part of the paper.

28. Santamaría ME, González-Cabrera J, Martínez M, <u>**Grbic V**</u>, Castañera P, Díaz I, Ortego F (2015) Digestive proteases in bodies and faeces of the two-spotted spider mite, *Tetranychus urticae*. Journal of Insect Physiology 78:69-77.

In this collaborative work, I contributed the data analysis and manuscript writing.

27. *Martel C, Zhurov V, Navarro M,* Martinez M, *Cazaux M,* Auger P, Migeon A, *Santamaria ME*, Wybouw N, Diaz I, Van Leeuwen T, Navajas M, Grbic M, <u>Grbic V</u> (2015) Tomato whole genome transcriptional response to *Tetranychus urticae* identifies divergence of spider mite-induced responses between tomato and Arabidopsis, **Molecular Plant-Microbe Interactions** 28:343-61.

M.C., Z.V., N.M., C.M. and S.ME. did experiments In this collaborative work, M.M. and D.I. helped with annotation of tomato peptidases. Experiments were performed in INRA-Montpellier (France) with help of A.P., M.A., W.N., V.L.T. and N.M.; G.M. contributed co-funding. I conceived the study, supervised experiments and data analysis, and wrote the manuscript.

26. **Fu G**, <u>**Grbic V**</u>, Ma S, Tian L (2015) Evaluation of somatic embryos of alfalfa for recombinant protein expression. **Plant Cell Reports** 34:211-21.

I co-supervised F.G. and was involved at all stages of this work.

25. **Jali SS, Rosloski SM, Janakirama P,** Steffen JG, *Zhurov V*, Berleth T, Clark RM, <u>**Grbic V**</u>. (2014) A plant-specific HUA2-LIKE (HULK) gene family in Arabidopsis thaliana is essential for development. **The Plant Journal** 80:242-54.

This is a PhD work of J.S.S.; S.J.G. and C.R.M. helped with RNASeq analysis; B.T. helped with the analysis of embryonic phenotypes; R.S.M. helped with genetic analysis and J.P. with phenotypic characterization. I conceived the study, supervised experiments and data analysis, and wrote the manuscript.

24. *Cazaux M, Navarro M,* Bruinsma KA, *Zhurov V,* Negrave T, Van Leeuwen T, <u>Grbic V,</u> Grbic M. (2014) Application of two-spotted spider mite *Tetranychus urticae* for plant-pest interaction studies. Journal of Visualized Experiments 4:89.

This is the protocol paper, describing procedures developed by our group; C.M., N.M., B.K., and Z.V. did experiments. V.L.T. contributed reagents; I am co-corresponding author with G.M.

23. *Zhurov V, Navarro M,* Bruinsma KA, Arbona V, *Santamaria ME, Cazaux M*, Wybouw N, Osborne EJ, **Ens C**, *Rioja C*, Vermeirssen V, Rubio-Somoza I, Krishna P, Diaz I, Schmid M, Gómez-Cadenas A, Van de Peer Y, Grbic M, Clark RM, Van Leeuwen T, <u>Grbic V</u>. (2014) Reciprocal responses in the interaction between Arabidopsis and the cell-content-feeding chelicerate herbivore spider mite. **Plant Physiology** 164(1):384-99.

This collaborative paper established Arabidopsis-mite interaction experimental system. Z.V., N.M., B.K., S.ME., C.M., E.C.,R.C. performed experiments. W.N., O.E.J, V.V., V.deP.Y., C.R.M, V. L.T. helped with mite microarray analysis. A.V. and G.C.A. did hormonal and indole glucosinolate analysis. K.P. and R.S.I contributed reagents. G.M. contributed co-funding. I conceived the study, supervised experiments and data analysis, and wrote the manuscript.

22. **Santamaria ME**, Martínez M, Cambra I, <u>Grbic V</u>, Diaz I. (2013) Understanding plant defence responses against herbivore attacks: an essential first step towards the development of sustainable resistance against pests. **Transgenic Research** 22(4):697-708.

This is the collaborative review with contributions of all authors.

21. Chahtane H, Vachon G, Le Masson M, Thévenon E, Périgon S, **Mihajlovic N, Kalinina A**, Michard R, Moyroud E, Monniaux M, Sayou C, <u>Grbic V</u>, Parcy F, Tichtinsky G. (2013) A variant of LEAFY reveals its capacity to stimulate meristem development by inducing RAX1. **The Plant Journal** 74(4):678-89.

My group contributed the analysis of axillary meristem phenotypes. I analysed data and wrote our section of results and discussion. *M.N.* and *K.A.* did experiments.

20. Hudson SD, *Zhurov V*, <u>Grbic V</u>, Grbic M and Hutter JL. (2013) Measurement of the Elastic Modulus of Spider Mite Silk Fibers Using Atomic Force Microscopy. Journal of Applied Physics 113: 154307.

In this collaborative work, I contributed reagents, funding and participated in manuscript writing.

19. **Rosloski SM**, Sing A, **Jali SS**, Balasubramanian S, Weigel D, <u>**Grbic V**</u>. (2013) Functional analysis of splice variant expression of MADS AFFECTING FLOWERING 2 of Arabidopsis thaliana. **Plant Molecular Biology** 81(1-2):57-69.

This is primarily the work of PhD student R.S.M.; S.A. and J.S.S. helped with genetic analysis; B.S. and W.D. provided resources. I conceived the study, supervised experiments and data analysis, and wrote the manuscript.

18. **Santamaria ME**, Cambra I, Martinez M, Pozancos C, González-Melendi P, <u>Grbic V</u>, Castañera P, Ortego F, Diaz I. (2012) Gene pyramiding of peptidase inhibitors enhances plant resistance to the spider mite *Tetranychus urticae*. **PLoS One** 7:e43011.

In this collaborative work, I contributed the data analysis, manuscript writing and funding. S.M.E. was co-supervised between me and D.I.

17. **Santamaría ME**, Hernández P, Ortego F, <u>**Grbic V**</u>, Grbic M, Diaz I, Martinez M. (2012) Cysteine peptidases and their inhibitors in *Tetranychus urticae*: a comparative genomic approach. **BMC Genomics** 13:307.

In this collaborative work, I contributed the data analysis, manuscript writing and funding. S.M.E. was co-supervised between me and D.I.

16. Grbić M, Van Leeuwen T, Clark RM, Rombauts S, Rouzé P, <u>Grbić V</u>, and 49 more. (2011) The genome of *Tetranychus urticae* reveals herbivorous pest adaptations. **Nature** 479:487-492.

In this collaborative work, I contributed to conceptualization, funding acquisition, methodology and all biological samples.

15. **Rosloski SM, Jali SS,** Balasubramanian S, Weigel D, <u>**Grbic V**</u>. (2010) Natural diversity in flowering responses of *Arabidopsis thaliana* caused by variation in a tandem gene array **Genetics** 186, 263-276.

This is primarily the work of PhD student R.S.M.; J.S.S. helped with genetic analysis; B.S. and W.D. provided resources. I conceived the study, supervised experiments and data analysis, and wrote the manuscript.

14. Koo SC, Bracko O, Park MS, Schwab R, Chun HJ, Park KM, Seo JS, <u>Grbic V</u>, Balasubramanian S, Schmid M, Godard F, Yun DJ, Lee SY, Cho MJ, Weigel D, Kim MC. (2010) Control of Lateral Organ Development and Flowering Time by the *Arabidopsis thaliana* MADS-box Gene AGAMOUS-LIKE6. **The Plant Journal** 62, 807-816.

In this collaborative work, I contributed to experimental design and manuscript writing.

13. *Wang Q*, Sajja U, Rosloski S, *Humphrey T*, Kim MC, Bomblies K, Weigel D, <u>Grbic V</u>. (2007) HUA2 Caused Natural Variation in Shoot Morphology of *A. thaliana*. Current Biology 17, 1513-1519.

This work was performed by my team. K.M.C. and B.K. contributed reagents; part of the work was performed at MPI with the funding and conceptual support of W.D. W.Q., S.U., R.S. and H.T. performed experiments. . I conceived the study, supervised experiments and data analysis, and wrote the manuscript.

12. Grbic M, Khila A, Lee K, Bjelica A, <u>Grbic V</u>, Whistlecraft J, Verdon L, Navajas M, Nagy L (2007) Mity model: *Tetranychus urticae*, a candidate chelicerate model organism. **Bioessays** 29, 489-496.

This is the collaborative review with contributions of all authors.

11. Martínez DE, Bartoli CG, <u>Grbic V</u>, Guiamet JJ (2007) Vacuolar cysteine proteases of wheat *(Triticum aestivum* L) common to leaf senescence induced by different factors. **Journal of Experimental Botany** 58, 1099-1107.

In this collaborative work I contributed reagents.

10. Truernit E, Siemering KR, Hodge S, <u>Grbic V</u>, Haseloff J. (2006) A map of KNAT gene expression in the Arabidopsis root. **Plant Molecular Biology** 60, 1-20.

In this collaborative work I contributed reagents.

9. <u>Grbic V</u> (2005) Comparative analysis of axillary and floral meristem development. **Canadian Journal of Botany** 83, 343-349.

8. **Poduska B**, *Humphrey T*, **Redweik A** and <u>Grbic V</u> (2003) The synergistic activation of *FLOWERING LOCUS C* by *FRIGIDA* and a new flowering gene *AERIAL ROSETTE 1* underlies a novel morphology in *Arabidopsis*. **Genetics** 163, 1457-1465.

P.B., H.T. and R.A. performed experiments. I conceived the study, supervised experiments and data analysis, and wrote the manuscript.

7. <u>Grbic V</u> (2003) SAG2 and SAG12 protein expression in senescing *Arabidopsis* plants. **Physiologia Plantarum** 119, 263-269.

6. <u>Grbic, V</u>. (2002) Spatial expression pattern of senescence-associated gene *SAG12* in tobacco (*Nicotiana tabacum* L). **Physiologia Plantarum** 116, 416-422.

5. Kalinina, A., Mihajlovic, N. and Grbic, V. (2002) Axillary meristem development in the branchless *Zu-0* ecotype of *Arabidopsis thaliana*. Planta 215, 699-707.

K.A. and M.N. performed experiments. I, analyzed data, prepared figures and wrote the manuscript.

4. <u>Grbic, V</u>. and Bleecker, A.B. (2000). Axillary meristem development in *Arabidopsis thaliana*. **The Plant Journal**_21, 215-224.

I performed experiments, analyzed data, prepared figures and drafted part of the results.

3. <u>Grbic, V</u>. and Bleecker, A.B. (1996). A Unique Body Plan Is Conferred on *Arabidopsis* Plants Carrying Dominant Alleles Of Two Genes. **Development** 122: 2395-2403.

I performed experiments, analyzed data, prepared figures and drafted part of the results.

2. <u>**Grbic**</u>, <u>**V**</u>. and Bleecker, A.B. (1995). Ethylene Regulates the Timing of Leaf Senescence in *Arabidopsis*. **The Plant Journal** 8, 595-602.

I performed experiments, analyzed data, prepared figures and drafted part of the results.

1. Hensel L.L.*, <u>**Grbic**</u>, <u>**V**</u>.*, Baumgarten, D.A., and Bleecker, A.B. (1993). Developmental and Age-Related processes That Influence the Longevity and Senescence of Photosynthetic Tissues in *Arabidopsis*. **The Plant Cell** 5, 553-564.

H.L.L. and me shared the first authorship; I performed differential gene expression to identify senescence-associated genes. I analyzed data, prepared figures and drafted part of the results.

Book:

Grbic, V. (2001) Axillary meristem development. In Annual Plant Reviews: Meristematic Tissues in Plant Growth and Development, ed. M. McManus and B. Veit, Sheffield Academic Press, 142-171.

Patents and collaboration with industry:

Miodrag Grbic, Vojislava Grbic, Yves van de Peer: **Spider mite silk proteins**. European Patent Office <u>https://usgene.sequencebase.com/patents/US20120245326</u> Protected in USA, Canada and EU on Apr. 7, 2011; patent licensed to Nanomitech.

Miodrag Grbic, Vojislava Grbic, Pierre Hilson: **Method to control spider mites**. European Patent Office

https://register.epo.org/espacenet/application;jsessionid=4B10ECD93AFCB41EA2950F795C78 25DA.RegisterPlus prod 1?number=EP10766036&tab=main. Protected in USA, Canada, Australia and EU on Apr. 7, 2011 Miodrag Grbic, Vojislava Grbic, Pierre Hilson (10/2010) "METHOD TO CONTROL SPIDER MITES". This application was given the application number PCT/EP2010/065311, as filed on 13/10/2010 with the European Patent Office, and claims priority of European patent application 09173040.8.

Miodrag Grbic, Vojislava Grbic, Yves van de Peer (10/2010) "SPIDER MITE SILK PROTEINS". This application was given the application number PCT/EP2010/064632, as filed on 01/10/2010 with the European Patent Office. This international patent application claims priority of European patent application 09172104.3.

Miodrag Grbic, Vojislava Grbic, Pierre Hilson (10/2009) "METHOD TO CONTROL SPIDER MITES" (filed provisional patent with the European Patent Office, application number EP 09173040.8.)

Miodrag Grbic, Vojislava Grbic, Yves van de Peer (10/2009) "SPIDER MITE SILK PROTEINS" (filed provisional patent with the European Patent Office application number EP 09172104.3.)

Grbic, V. (2002) "*ART1*, A GENE THAT CONTROLS THE TIMING OF FLOWERING IN PLANTS" (filed on May 30, 2002 with the Canadian Patent Application No. 2,386,752)

Industrial partners and growers' associations: Bayer CropSince, Greenlight Bioscience, Valent Biosciencies, Agri-Neo, Ontario Greenhouse Vegetable Growers and Grain Farmers of Ontario.

Invited presentations:

- Vojislava Grbić (2023) Host-adaptability in Tetranychus urticae, 8th IOBC-WPRS Meeting, Integrated control of plant-feeding mites, Belgrade, Serbia, 4 – 7 September 2023.
- Vojislava Grbić (2023) Host-adaptability in Tetranychus urticae, 8th IOBC-WPRS Meeting, Integrated control of plant-feeding mites, Belgrade, Serbia, 4 – 7 September 2023.
- Vojislava Grbic (2022) Potential of RNAi as a tool for the control of the two-spotted spider mite, *Tetranychus urticae*, ESA the 2022 Joint Annual Entomology Meeting, Vancouver, **Canada**, 13-17 November 2022.
- Vojislava Grbic (2021) Rapid specialization of counter defenses enables two-spotted spider mite to adapt to novel plant hosts, 36th Annual Meeting of the International Society of Chemical Ecology, **South Africa**, 9 September 2021.
- Vojislava Grbic (2021) Environmental RNA interference in two-spotted spider mite, *Tetranychus urticae*, a special session "Biopesticides and biocontrol agents: recent advances and regulatory pathways" at the 72nd International Symposium on Crop Protection, **Belgium**, 18 May, 2021.
- Vojislava Grbic (2021) Development of new tools against resistant mites, WORKSHOP DE BIOLOGIA MOLECULAR DE ÁCAROS DO BRASIL, **Brazil**, March 11, 2021.
- Vojislava Grbic (2021) Precision Agriculture, Development of Novel Tools for Crop Protection, OMAFRA, **Canada**, February 1, 2021.
- Vojislava Grbic (2020) Precision Agriculture, Development of Novel Tools for Crop Protection, OGVG, **Canada**, October 21, 2020.
- Vojislava Grbic (2019) RNAi as reverse genetics tool in two-spotted spider mite, *Tetranychus urticae.* ESA Entomology 2019, **USA**, November 15, 2019.

- Grbic V (2019) Development of new tools for the control of the two-spotted spider mite, *Tetranychus urticae.* Nippon Soda, **Japan**, July 1, 2019.
- Grbic V (2019) The interactions between plant hosts and the two-spotted spider mite, *Tetranychus urticae.* Southwestern University, Chongqing, **China**, June 25, 2019.
- Grbic V (2019) The interactions between plant hosts and the two-spotted spider mite, *Tetranychus urticae.* Tokyo University of Agriculture and Technology, Tokyo, **Japan**, June 19, 2019.
- Grbic V (2018). Versality of plant defences against the two-spotted spider mite, *Tetranychus urticae.* XV International Congress of Acarology, Antalya, **Turkey**
- Grbic V (2018). Omics of interactions between plant hosts and the two-spotted spider mite, *Tetranychus urticae*. The III Latin American Congress of Acarology (III CLAC) and the VI Brazilian Symposium of Acarology (VI SIBAC), Pirenopolis, **Brazil**
- Grbic V (2017). Adaptation to xenobiotic stress in Tetranychid mites. MetaSysX GmbH, Potsdam, **Germany**
- Grbic V (2017). Concepts of plant-herbivore interactions: Host adaptation in Tetranychid mites. Seminar at Chemical Ecology Laboratory, Chiba University, Chiba, Japan -Keynote
- Grbic V (2017). High-throughput platform for RNAi-based reverse genetics in the chelicerate model Tetranychus urticae. Bayer CropScience, Monhaim, **Germany**
- Grbíc V (2016). Genetic variability of RNAi pest control. Ontario Pest Management Conference, Guelph, **Canada**
- Suzuki, T. Espana, M. U. Nunes, M. A. Namin, H. H. Zhurov, V. Grbic, M. Grbic, V. (2015). Different methods to deliver RNAi in spider mites. 7th Spider Mite Genome Meeting, L'Escala, **Spain**
- Vojislava Grbic. A genomics view of plant mites, 14th International Congress of Acarology, Kyoto, **Japan**, 14-18 July, 2014.
- Vojislava Grbic. Genomics of plant-spider mite interactions, Invited speaker, Boyce Thompson Institute Cornell University, **USA**, April 14, 2014.
- Vladimir Zhurov, Kristie A. Bruinsma, Nicky Wybouw, Edward Osborne, Miodrag Grbic, Richard Clark, Thomas Van Leeuwen and Vojislava Grbic. The two spotted spider mite *Tetranychus urticae*: a herbivore that is eating your plants as well, Invited speaker, Ontario Pest Management Conference, Guelph, **Canada**, Oct 7, 2013.
- Vladimir Zhurov, Marie Navarro, Maria E. Santamaria, Kristie A. Bruinsma, Vicente Arbona, Marc Cazaux, Nicky Wybouw, Edward J. Osborne, Cherise Ens, Isabel Diaz, Markus Schmid, Miodrag Grbic, Richard M. Clark, Thomas Van Leeuwen, Vojislava Grbic, Interaction between *Arabidopsis* and spider mite *Tetranychus urticae*, Invited speaker, 52nd Annual Meeting of the Phytochemical Society of North America, Corvallis, USA, August 3-7, 2013.
- Grbic V. Reciprocal transcriptional responses in Arabidopsis-*Tetranychus urticae* interaction, Invited seminar, East Malling Research, **UK**, July 4, 2013
- Grbic V. Spider mite, *Tetranychus urticae*, a novel model for plant-herbivore interaction studies. Invited seminar, The Institute for Multidisciplinary Research (IMSI), University of Belgrade, **Serbia**, June 13, 2013.
- Grbic V. The genomics of plant-herbivore interaction. Invited seminar, Department of Plant Agriculture, Univ. of Guelph, **Canada**, January 23, 2013
- Vojislava Grbic, Arabidopsis *Tetranychus urticae* herbivory. 7th Symposium of the European Association of Acarologists, Vienna, **Austria**, July 9-13, 2012.
- Grbic V. The genomic dissection of interaction between *Arabidopsis* and *T. urticae*. Invited presentation at 6th International Symposium on Molecular Insect Science, Amsterdam, **The Nederland**, October 3 2011.

- Grbic V. The genomics of herbivore-plant interaction: whole genome sequence of Tetranychus urticae provides novel genomic tools for dissecting plant-pest relationship, invited seminar, McMaster University, Hamilton, **Canada**, January 28th, 2011.
- Grbic V. Molecular biology of plant-mite interactions, the XIII International Congress of Acarology, Recife, **Brazil**, 22-28 August, 2010.
- Grbic V. The first chelicerate genome of a major agricultural pest, spider mite *Tetranychus urticae*, an emerging model for plant-herbivore interactions. **XXIII** International congress of acarology (plenary talk) Recife, **Brazil** 22-28 August 2010.
- Grbic V. Analysis of spider mite *Arabidopsis* interaction. The first spider mite meeting, Logrono, **Spain**, 15-19 October, 2009.
- Grbic V. Arabidopsis-spider mite interaction studies. CSSP/PDW Conference, Toronto, **Canada**, December 6th, 2008.
- Grbic, V. Axillary meristem development and response to spider mite feeding. University of Guelph, **Canada**, November 17, 2008.
- Grbic V. Shoot patterning in Arabidopsis, invited seminar, AAFC, October 1st, 2008, London, **Canada**.
- Grbic V. Whole genome sequencing of *Tetranychus urticae*: novel genomic tools in acarological research. 6th Symposium of European Association of Acarologists, Montpellier, France 21-25 July 2008.
- Grbic, V. Axillary meristem development and response to spider mite feeding. University of Toronto, **Canada**, January 25, 2008.
- Grbic, V. HUA2 Caused Natural Variation in Shoot Morphology of A. thaliana. 41st Plant Development Workshop, Ottawa, Canada, November 10, 2007.
- Grbic, V. Shoot patterning in Arabidopsis. MPI for Plant Breeding Research, Cologne, **Germany**, November 28, 2006.

Vontas J, + 21 co-	"NextGenBioPest" - Next	5,884,125	2023-2027
applicants	Generation Biopesticides for the	EUR	
	control of the most "difficult-to-	(8,446,661	
	manage" pests and	CAD)	
	pathogens in fruits and vegetables	,	
Toshiyuki Fukuhara	The Japan Society for the	JPY (¥)	2023-2025
(PI), T Umezawa	Promotion of Science (JSPS)	3,000,000	
(co-PI), T Suzuki			
(co-PI), S Adachi	Global Innovation Research	\$28,810 CAD	
(co-PI)	Functional and biochemical		
International	interactions between abiotic and		
Researchers:	biotic stress responses in plants		
J Anderson, H			
Koiwa, P Verslues,			
V Grbic, D Voigt, R			
Sage			
Grbic, V (PI)	Genome Canada – GAPP:	\$4,109,813	2023-2026
Grbic, M	Biopesticide with New Modes of		
Bennett, N	Action for Control of Highly		
Narva, K	Polyphagous Mite Agricultural		
	Pests		
Grbic, V	TESTING GreenLight formulated	\$25,000	2022
	dsRNAs	(USD)	

Research funding (since 2016):

		\$34,482.50	
		CAD	0004 0004
Scott, I	Surveying the population structure	\$ 168,000	2021-2024
	and resistance to pesticides in		
	soybean two-spotted spider mite		
Perperde Mark		¢ 150.000	2020
Grbic Voiislava Hill	Time of Flight Mass Spectrometer	\$ 150,000	2020
Kathleen Lindo, Zoe	for GC-based analysis of small		
Macfie, Sheila Way,	molecules		
Danielle			
Chruszcz M, Makris	USDA-NSF: Malagular Dagis of Yanghistia	\$ 777,372	2020-2023
I, Grdic IVI, Grdic, V	Molecular Basis of Xenoblotic	(USD) (\$144.000	
	Tetranychus urticae	USD to	
		Western)	
Grbic, V	OGVG/MITACS:	\$ 450,000	2020-2023
	Improved pest management:		
	diagnostics for management of		
	populations of the two-spotted		
	spider mite, aphids, whiteflies and		
	thrips		
Orbia V/		¢ 000 000	0040 0004
Grdic, V	Identification of Molecular	\$ 282,000	2018-2024
	Mechanisms underlying Reciprocal		
	Responses in the Interaction		
	between Arabidopsis and the Cell-		
	Content-Feeding Chelicerate		
lohn Vontas (PI)		2 001 525 €	2018-2022
and 12 others	Innovations in plant protection (SFS-	2,991,925 € (0 € to	2010-2022
	17-2017) Innovative tools for rational	Western)	
	control of the most difficult-to-		
	manage pests ("super pests") and		
Grbic M (PI) Grbic		¢ 3 632 863	2015 2024
V (co-PI) and 5	Genomics-based environmentally	φ 3,032,003	2013-2024
others	friendly technologies for control of a		
	high-risk pest in agriculture (G-		
	PEST)		0047 0000
I Umezawa (PI), I Nishidate T Suzuki	The Japan Society for the Promotion of Science (JSPS)	JPY (¥)	2017-2020
SC Peck. J		3,000,000	
Anderson, J	Global Innovation Research	\$28,810 CAD	
Barrero, V Grbic , D	Functional and biochemical		
McDuff	interactions between abiotic and		
	piolic stress responses in plants		

Grbic, V	NSERC ENGAGE Plus	\$25,000	2016
	The effect of Neo-Boost on the performance of Tetranychus urticae		
Grbic, V	WESTERN STRATEGIC SUPPORT FOR NSERC SUCCESS – ACCELERATOR Development of new RNAi-based	\$50,000	2016
	biopesticides		
Grbic, V	UWO RESEARCH PROMOTION FUND New generation sustainable tools to	\$30,000	2015-2016
	control emerging mite pests under climate change		
Cross J and 12 others	FACCE-ERA-NET+	2,726,000 € (0 € to	2015-2018
	New generation sustainable tools to control emerging mite pests under climate change	Western)	
Grbic, V	NSERC Discovery Grant	\$ 125,000	2013-2017
	Characterization of Arabidopsis- spider mite interaction		

Selected funding (2003-2016):

Grbic, M (PI), Grbic,	ORF-GL2	\$ 1,977,514	2011-2015	
V (co-PI) and 5 others	Pest genomics and plant breeding in a sustainable agricultural pest management			
Grbic, M (PI), Grbic,	Genome Canada	\$ 6,390,093	2009-2014	
V (co-PI) and 6	Genomics in Agricultural			
others	management, GAP-M			

TEACHING AND TRAINING

(last 5 years, year 2018/19 sabbatical leave): Undergraduate courses: Bio3593, Genetic Engineering, 2016-2022, 60-120 students Bio4950, Seminars in genetics, 2016-2018, ~25 students Bio4515, Genome Biology, 2019-2021, ~30 students Bio4999/Bio4790/Bio4791, Honors Research Thesis, 2016 - 2021, 1-5 students

Graduate courses:

Bio9913, Scientific Writing, 2021, 4 students **Bio9510**, Plant Responses to Biotic Stress, 2014, 18 students

Definitions of supervisory roles: In the sections below, 'joint supervision' means that both supervisors contributed intellectually to the research and to mentoring of the trainee.

Summary of trainee supervision	Completed	In Progress
Research Associate ¹	0	1
Post-doctoral fellows ¹	19	4
Ph.D. students ¹	10	1
M.Sc. students ¹	8	4
Undergraduate thesis students*	10	1
Visiting students ¹	4	0
Technicians ¹	2	0
Project manager ¹	2	0
¹ since 2003		
*since 2016		

<u>Undergraduate supervision (thesis/exchange/summer research) (since 2016)</u> 2016/17:

Christopher Dumigan, UWO (thesis) Jose Garcia Bonilla, UWO (thesis) Yannick Lyn, UWO (thesis) Hanna Varonina, UWO David Letwin, UWO

2017/18:

Hanna Veronina, UWO (thesis) David Letwin, UWO (thesis) Itzel Guadalupe Becerril Rojas, Mexico (MITACS, exchange)

2018/19:

Emma Somerville, UWO (summer research) Ashley Hughes, UWO (summer research)

2019/20:

Nivitha Bhaskar, India (Exchange)

2020/21:

Dorothy Lin, UWO (thesis) Anton Alexander, UWO (thesis) Kennedy Barkhouse, UWO (thesis) Jorden Maglov, UWO (thesis) Min Yi Feng, UWO (thesis)

2021:

Min Yi Feng, WUSRI, (summer research) Keegan Mongru, WUSRI, (summer research)

2021/2022:

Jenna Gallo, UWO, (thesis) Alexandria Rhan, UWO, (thesis) Eleonor Khochaba, WUSRI, (summer research) Renee Smith, WUSRI, (summer research) Ethan Zand, WUSRI, (summer research) Tevon Pitambar, (summer research)

2022/2023:

Renee Smith, UWO, (thesis) Ethan Zand, UWO, (thesis) Kathleen Hon, UWO, (thesis) Jocey Marks, UWO, (thesis) Tevon Pitambar, WorkStudy George Del Grosso, WUSRI, (summer research) Reagan Michiels, WUSRI, (summer research) Gerardo Cendejas Mendoza, Mexico, (MITACS, exchange) Katja Gollas, Germany, (MITACS, exchange) Vladyslav Husak, Ukraine, (MITACS, exchange) Jocey Marks, (summer research)

2023/2024:

George Del Grosso, UWO, (thesis) Reagan Michiels, UWO, (thesis)

Graduate students (since 2003):

<u>MSc:</u>

- 1. Ethan Surman, September 2022
- 2. Alexander Harrison, September 2022
- 3. Zoran Culo, May 2022
- 4. Jorden Maglov, September 2021
- 5. Nivitha Bhaskar, May 2021
- 6. Hanna Varonina, graduated 2021
- 7. David Letwin, ongoing
- 8. Jeremy Spenler, ongoing
- 9. Petar Miletic, (co-supervised with Krzysztof Szczyglowski), graduated 2022
- 10. Sean Pham, graduated 2021
- 11. Zoran Culo, graduated 2020
- 12. Michele Antonacci, Univ of Bari, Italy, graduated 2020
- 13. Huzefa Ratlamwala, graduated 2014
- 14. Christopher Doan, graduated 2013
- 15. Cherise Ens, graduated 2012
- 16. Ingrid Fung, graduated 2011
- 17. Guohua Fu, (co-supervised with Tian Lining), graduated 2011

PhD (since 2003):

- 1. Michele Antonacci, started May 2021
- 2. Joseane Nascimento, Brazil, graduated 2020
- 3. Nicolas Bensoussan, graduated 2019
- 4. Kristie Bruindsma, graduated 2019
- 5. Golnaz Salehipourshiri, graduated 2018
- 6. Hooman Namin (joint supervision with Ian Scott), graduated 2017
- 7. Pengyu Jin, China, graduated 2017
- 8. Preetam Janakirama, graduated 2013
- 9. Sarah Rosloski, graduated 2010
- 10. Sathya Sheela Jali, graduated 2009
- 11. Uday Sajja, graduated 2007

Postdoctoral Fellows and other research personnel (since 2003):

- 1. Chetan Sharma, PDF (2022)
- 2. Sameer Dixit, PDF (Completed, May 31, 2021; Assistant Professor/Group Leader National Institute of Plant Genome Research New Delhi, India)
- 3. Akanchha Shukla, PDF (Completed, May 31, 2021; Deputy Manager (Pre-clinical operations and strategy); Dabur Research Foundation (DRF), India)
- 4. Emilie Widemman, PDF (Completed, July 31, 2021; Assistant Professor University of Strasbourg, France)
- 5. Kristie Bruindsma, PDF (In Progress)
- 6. Vinayak Singh, PDF (2021, In Progress)
- 7. Joseane Nascimento, PDF (In Progress)
- 8. Cristina Rioja, PDF (Completed; Marie Currie fellow University of Copenhagen, Denmark)
- 9. Andreia Nunes (joint supervision with M Grbic), PDF (Completed; research scientists, EMBARPA, Brazil)
- 10. Brendan Walshe-Roussel (joint supervision with M Bernards), PDF (Completed; Health Canada, Canada)
- 11. Julien Le Roy, PDF (Completed; Senior Scientist; La Cité's Bio-Innovation Technology Access Center)
- 12. Repon Saha (joint supervision with M Bernards), PDF (Completed; PDF; UWO)
- 13. Nicolas Bensoussan, PDF (Completed; INRA Bordeaux, France)
- 14. Maria Espana (joint supervision with M Grbic), PDF (Completed; Laboratory Manager, Tcolors, Spain)
- 15. Takeshi Suzuki (joint supervision with M Grbic), PDF (Completed; Associate Professor, University of Tokyo, Japan)
- 16. Jose Diaz Riquelme (joint supervision with M Grbic), PDF (Completed; Head of Tissue Culture Lab, Viveros Provedo S.A., Spain)
- 17. Catherine Martel, PDF (Completed; Molecular Biologist, Therapure BioPharma Inc., Canada)
- 18. Estrella Santamaria, (Completed; Research scientist, CSIC, Spain)
- 19. Gustavo Acevedo-Hernandez (joint supervision with M Grbic), PDF (Completed; Researcher, Centro Universitario de la Ciénega (CUCIENEGA), Mexico)
- 20. Marc Cazaux (joint supervision with M Grbic), PDF (Completed; Founder of company HelicA, France)
- 21. Marie Navarro (joint supervision with M Grbic), PDF (Completed; Researcher, Innovi, France)
- 22. Qing Wang, PDF (Completed)
- 23. Tania Humphrey, PDF (Completed; Vice President, Research and Development, Vineland Research and Innovation Centre, Canada)

Vladimir Zhurov (joint supervision with M Grbic), Research Associate (In Progress)

Biljana Popovic, Technician (Completed) Jeremy Spenler, Technician (Completed)

Mischa Schlemmer, Project Manager (Completed) Tara Negrave, Project Manager (Completed)

Hosted guest researchers, students and postdocs from Cuba, Japan, Mexico, Brazil, China, Germany in duration of 3 months to 2 years.

Helped the establishment of the Graduate Program in Bioinformatics between Western and the University of Ghent (2013)

PROFESSIONAL AND INSTITUTIONAL SERVICE (since 2016)

Editorial activities:

2021 – Academic Editor, Insects

2021 – Member of the Editorial Board of Frontiers in Plant Science

2017/6 - 2022/6 Guest Associate Editor, Frontiers in Microbiology and Frontiers in Plant Science

2017/6 - 2022/6 Review Editor, Frontiers in Plant Science

2017/6 - 2018/6 Topic Editor, Frontiers in Plant Science; Research Topic title: Plant responses to phytophagous mites/thrips and search for resistance

Granting panels:

2020 Early Researcher Awards Round 15 – Environment and Natural Sciences panel 2021 Early Researcher Awards Round 16 – Environment and Natural Sciences panel 2022 Early Researcher Awards Round 17 – Environment and Natural Sciences panel

Refereed articles for following journals (last 3 years):

The Plant Journal (1), Plant Physiology (2), Crop Protection (5), PLOS One (2), New Phytologist (1), Frontiers in Plant Sciences (4), Insect Biochemistry and Molecular Biology (7), Pest Management Science (9), BMC Genomics (2), Experimental and Applied Acarology (3); Pesticide Biochemistry and Physiology (3)

Refereed grant proposals for following agencies (last 3 years):

Natural Sciences and Engineering Research Council of Canada, Canada (3); MITACS, Canada (1); Ontario Genomics, Canada (1); United States Department of Agriculture, USA (1); National Science Foundation, USA (1); The Biotechnology and Biological Science Research Council, UK (1); AgreenSkills FP7 (France) (3); ANR (France) (2); GIF (Germany/Israel) (1); OECD (1); National Science Centre (Poland) (1); Israel Science Foundation (ISF) (1); Netherlands Organisation for Scientific Research (NWO, The Netherlands) (1); Latvian Council of Science (1)

Workshop/conference organizer:

- Grbic M and Grbic V, 13th Spider mite genome meeting, Logrono, **Spain**, 11-14 September, 2023.
- Grbic M and Grbic V, 12th Spider mite genome meeting, Logrono, **Spain**, 17-20 November, 2022.
- Grbic M and Grbic V, 11th Spider mite genome meeting, Logrono, **Spain**, 4-6 November, 2019.
- Grbic M and Grbic V, 10th Spider mite genome meeting, Logrono, **Spain**, 5-8 November, 2018.
- Grbic V, Precision agriculture, London, ON, Canada, September 24, 2018.
- Grbic M and Grbic V, 9th Spider mite genome meeting, Logrono, **Spain**, 23-25 October, 2017.

- Grbic M and Grbic V, 8th Spider mite genome meeting, Logrono, **Spain**, 17-21 October, 2016.
- Grbic V, Symposium on Sustainable Agriculture: Workshop 3 Pests and Pathogens, London, ON, **Canada**, April 14, 2016.

University Administrative and Committee Duties:

a) University level at Western

- Undergraduate Science Case Competition, Scinapse March 19, 2016
- Innovation Ambassador, January 2019 –

b) Faculty of Science

• Development of the International Centre for Sustainable Agriculture (2013-2016)

c) Department

- Search Committee (2021)
- Administrator of the ORF grant (SAB meetings (2x/year); financial reporting (4x/year); tracking partners and progress (throughout)) (2016-current)
- Chair, Seminar Committee (2016-2018)