

Personal data:

Name: Miodrag Grbic
Citizenship: Canada/Serbia
Address: Miodrag Grbic, Department of Biology, University of Western Ontario, Biology and Geology Building, London, Ontario, N6A 5B7, Canada
Phone: Office: (519) 661-2111 X 86776; Lab: (519)661-2111 X 86794; Fax: (519) 661-3935; Email: mgrbic@uwo.ca
Current position: 2004-present Associate Professor, Department of Biology, University of Western Ontario, Canada

Employment and training:

2006-2008 Marie Curie Incoming International Professor, Max Planck Institute for Developmental Biology, Tubingen, Germany
2004-2005 Visiting Professor, Max Planck Institute for Developmental Biology, Tubingen, Germany (sabbatical)
1997-2003 Assistant professor, Department of Biology, University of Western Ontario, Canada
2003-present Adjunct Professor, Wayne State University (USA)
1996-1998 Human Frontier postdoctoral fellow, Wellcome Cancer and Developmental Biology Research Institute, Univ. of Cambridge (UK)
1995-1996 NSF postdoctoral fellow, University of Wisconsin, Madison (USA)
1989-1995 Ph.D. student University of Wisconsin, Madison (USA) double major in Developmental Biology and Entomology
1985-1988 M.Sc. student University of Novi Sad (Yugoslavia) Entomology
1979-1983 B.Sc. student University of Novi Sad (Yugoslavia) Entomology

Honors and awards:

Investigador vinculado de CSIC, Instituto de Ciencias de la Vid y del Vino (CSIC, UR, Gobierno de La Rioja), Logrono, Spain (2011-2014)
A consultant to the University of Montenegro for international scientific cooperation (2009)
Section Editor, Journal Arthropod Structure and Development, Elsevier (2006-current)
OECD fellowship 2008, Tubingen, Germany
Marie Curie Incoming International Fellowship, funded proposal title: "Genomics and genetics of spider mite *Tetranychus urticae*: development of novel model organism important for agriculture" 2005 (EU)
Nominated for Canadian representative in Society of Developmental Biology of America 2003
Adjunct Professor, Wayne State University 2003 (USA)
Premier's Research Excellence Award 2000; Ministry of Energy, Science and Technology Ontario, (Canada)
HFSP Postdoctoral Fellowship, Human Frontier in Science Program 1996 (International)

NSF Postdoctoral Fellowship, National Science Foundation 1995 (USA)
NSF travel award to the Evolution of Development Conference, 1995 (USA)
Fulbright fellowship for Ph.D. studies; Fulbright Foundation, 1989 (USA)
COCHRAN fellowship (visiting scientist), United States Department of Agriculture,
1989 (USA)

Publications:

- Stephen D. Hudson, Vladimir Zhurov, Vojislava Grbic, Miodrag Grbic, Jeffrey L. Hutter.
(2013) Measurement of the Elastic Modulus of Spider Mite Silk Fibers Using Atomic
Force Microscopy. **Journal of Applied Physics** Volume: 113 Issue: 15 154307 doi:
10.1063/1.4800865
- Van Leeuwen, T, Dermauw, W, Grbic, M, Tirry, L, Feyereisen, R (2013) Spider mite control
and resistance management: does a genome help? **Pest Management Science** Vol. 69
156-159.
- Dermauw, W, Wybouw, N, Rombauts, S, Menten, B, Vontas, J, Grbic, M, Clark, RM,
Feyereisen, R, Van Leeuwen, T (2013) A link between host plant adaptation and
pesticide resistance in the polyphagous spider mite *Tetranychus urticae*. **Proceedings
of the National Academy of Sciences of the United States of America** 110: 113-122
- Wybouw, N, Balabanidou, V, Ballhorn, DJ, Dermauw, W, Grbic, M, Vontas, J, Van Leeuwen,
T (2012) A horizontally transferred cyanase gene in the spider mite *Tetranychus
urticae* is involved in cyanate metabolism and is differentially expressed upon host
plant change. **Insect Biochemistry and Molecular Biology** Vol.42: 881-889.
- Santamaria, ME, Hernandez-Crespo, P, Ortego, F, Grbic, V, Grbic, M, Diaz, I & Martinez, M.
(2012) Cysteine peptidases and their inhibitors in *Tetranychus urticae*: a comparative
genomic approach. **BMC Genomics**. 13:307
- Veenstra, JA, Rombauts, S & Grbic, M (2012) In silico cloning of genes encoding
neuropeptides, neurohormones and their putative G-protein coupled receptors in a
spider mite. **Insect Biochem Mol Biol** 42(4): 277-95
- Van Leeuwen T, Demaeht P, Osborne EJ, Dermauw W, Gohlke S, Nauen R, Grbic M, Tirry
L, Merzendorfer H & Clark RM (2012) Population bulk segregant mapping uncovers
resistance mutations and the mode of action of a chitin synthesis inhibitor in
arthropods. **Proceedings of the National Academy of Sciences of the United States
of America** 109: 4407-4412
- Dermauw W, Ilias A, Riga M, Tsagkarakou A, Grbić M, Tirry L, Van Leeuwen T & Vontas J
(2012) The cys-loop ligand-gated ion channel gene family of *Tetranychus urticae*:
implications for acaricide toxicology and a novel mutation associated with abamectin
resistance. **Insect Biochemistry and Molecular Biology** 42: 455-465
- Miodrag Grbic et al. :The genome of *Tetranychus urticae* reveals herbivorous pest
adaptations. **Nature** Vol. 479: 487- 492.
- Miodrag Grbic Evolution of polyembryonic development in parasitic wasps. In: Genetica
molecolare dello sviluppo degli insetti. **Atti della Accademia Nazionale Italiana di
Entomologia** 2008. Firenze. 43-51.
- Zhurov V., Terzin, T., and Grbic M (2007) The (In)discrete charm of the polyembryony.
Cellular and Molecular Life Sciences. Vol. 64 no. 21: 2790-2798.
- Miodrag Grbic, Abderrahman Khila, Kwang-Zin Lee, Anica Bjelica, Vojislava Grbic,
Jay Whistlecraft, Lou Verdon, Maria Navajas and Lisa Nagy (2007) Mity model:
Tetranychus urticae, a candidate chelicerate model organism. **Bioessays** 29: 489-496.

- Khila, A and Grbic M. (2007) Gene silencing in the spider mite *Tetranychus urticae*: dsRNA and siRNA parental silencing of the *Distal-less* gene. **Development, Genes & Evolution** 414:251-261.
- Zhurov V and Grbic, M. (2005) Transplantation of a polyembryonic wasp embryo: a technique for transfer of an endoparasitic embryo into the host egg. **Development, Genes & Evolution** 215: 645-650.
- Zhurov, V., Terzin, T. and Grbic, M. (2004) Early blastomere determines embryo proliferation and caste fate in a polyembryonic wasp. **Nature** 432:746-769.
- Grbic M. (2003) Polyembryony in parasitic wasps: evolution of a novel mode of development **International Journal of Developmental Biology** 47: 633-642.
- Dearden, P.K., Grbic, M., Donly, C. (2003) Vasa expression and germ-cell specification in the spider mite *Tetranychus urticae*. **Development, Genes and Evolution** 212:599-603.
- Dearden, P.K., Donly, C., Grbic M. (2002) Expression of pair-rule gene homologues in a chelicerate: early patterning of the Two-Spotted Spider Mite *Tetranychus urticae*. **Development** 129: 5461-5472.
- Grbic, M. (2000) "Alien" wasps and evolution of development. **BioEssays** 22: 920-932.
- Dearden, P., Grbic, M., Falciani F., Mora, F., Akam, M. (2000) Maternal expression and early zygotic regulation of the Hox3/zen gene in the grasshopper *Schistocerca gregaria*. **Evolution and Development** 2(5) 1-12.
- Strand MR, Grbic M (1999) Life history shifts and alterations in the early development of parasitic wasps. **Invertebrate reproduction & Development**, 36: (1-3) 51-56.
- Ives, A. R., S. S. Schooler, V. J. Jagar, S. E. Knuteson, Grbic M, and W.H. Settle. (1999) Variability and parasitoid foraging efficiency: a case study of pea aphids and *Aphidius ervi*. **American Naturalist** Vol. 154, pp. 652-673.
- Grbic, M. and Strand, M. (1998) Shifts in the life history of parasitic wasps correlate with pronounced alterations in early development. **Proceedings National Academy of Sciences USA**, 95,1097-1101.
- Grbic, M., Nagy, L. Strand, M. (1998) Polyembryonic embryogenesis: a major departure from typical insect embryogenesis. **Development, Genes and Evolution** 208, 69-81.
- Strand M. and Grbic, M. (1997) Development and evolution of polyembryonic insects. **Current Topics in Developmental Biology** 35, 121-160.
- Grbic, M., Rivers, D., Strand, M. (1997) Caste specification in the polyembryonic wasp *Copidosoma floridanum* : *in vivo* and *in vitro* analysis. **Journal of Insect Physiology** 43, 553-565.
- Grbic, M., Nagy, L., Strand, M. (1996) Pattern duplications in larvae of the polyembryonic wasp *Copidosoma floridanum*. **Development, Genes and Evolution** 206, 281-287.
- Grbic, M., Nagy, L., Carroll, S., Strand, M. (1996) Polyembryonic development: insect pattern formation in a cellularized environment. **Development** 122, 795-804.
- Grbic, M, Ode,P., Strand, M. R. (1992) Sibling rivalry and brood sex ratio in polyembryonic wasps. **Nature**, Vol. 360, 254-256.
- Baehrecke, E.H., Grbic, M., Strand, M.R. (1992) Serosa ontogeny and in two embryonic morphs of *Copidosoma floridanum*, the role of host hormones. **Journal of Experimental Zoology** 262, 30-39.
- Grbic M; Strand M (1991) Intersexual variation in the precocious larvae of the polyembryonic wasp *Copidosoma floridanum*. Wajnberg, E. and S. B. Vinson (Ed.) Trichogramma and other egg parasitoids 3rd international symposium,

Colloques de l'INRA no. 56 San Antonio, USA no. 56: 25-28.

Grbic, M.; Lakic, B.; Mihajlovic, L. (1990) Predators and parasitoids of *Psylla pyri* L. (Hom.: Psyllidae) in Vojvodina (Yu). **Bulletin SROP** Volume: 13 Issue: 1 Pages: 44-54.

Grbic, M. (1987) A study of the biology and control of *Adoxophyes reticulana* Hbn., a new pest of plantation orchards in Vojvodina Province. *Zbornik Matice Srpske za Prirodne Nauke* Volume: 73 15-23.

Book chapters:

Nagy, L.M. and Grbic, M. (2001) "Embryogenesis." In: **Encyclopedia of Insects**, eds. Vincent Resh and Ring Cardé, Academic Press: San Diego.

Nagy, L. and Grbic, M. (1999) Cell lineages in larval development and evolution- Insects. In: **The origin and evolution of larval forms**. (B.K. Hall and M.H. Wake eds). Academic Press 275-300.

Strand, M.R., Grbic, M. (1997) Development and life history of polyembryonic parasitoids. In: **Parasites: Effect on Host Endocrinology and Behaviour**. (N. Backage editor) Chapman and Hall, New York. 37-56

Patents:

- 1) Miodrag Grbic, Vojislava Grbic, Piere 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.
- 2) 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.
- 3) Miodrag Grbic, Vojislava Grbic, Yves van de Peer: **Spider mite silk proteins**. Patent no: . EP 09173040.8 Date of disclosure 02/10/2009. European Patent Office
- 4) Miodrag Grbic, Vojislava Grbic, Piere Hilson: **Method to control spider mites**. Patent no: . EP 09172104.3 Date of disclosure 14/10/2009. European Patent Office.
- 5) Van Leeuwen T, Bryon A, Grbic M, Van de Peer Y: **A novel class of antifreeze proteins**. European Patent Application, Patent no: EP 12159421.2 Date of disclosure 2012. European Patent Office

News and views articles about my papers:

Faculty of 1000 <http://f1000biology.com/article/id/1007204/evaluation> our article Zhurov, V., Terzin, T. and Grbic, M. (2004) Early blastomere determines embryo proliferation and caste fate in a polyembryonic wasp. **Nature** was rated as "must read" by Patricia Simpson , Siegfried Roth , Alejandro Sanchez-Alvarado

Dawis G.K. and Patel N.H. (2003) Playing by pair-rules? **BioEssays** 25: 425-429. Paper describing significance of our discovery published in *Development* (2003).

Biotechnology focus: Spidermite genetics can control pests. February 2003 issue. http://www.lab-focus.com/feb_bio03.html, Short note on biotechnology impact of our paper published in *Development* (2003).

Wray GA and Abouheif E. (1998) **Current Opinion in Genetics and Development** 8:675-680. Our paper published in **Proceedings National Academy of Science USA** (1998) was highlighted as contribution of special interest.

French, V. (1996) Segmentation (and *eve*) in very odd insect embryos. **BioEssays**, 6, 435-438.

Godfrey, C. (1992) Strife among siblings. **Nature**, 360, 254-256.

Invited conference presentations:

Miodrag Grbic, Thomas Van Leeuwen, Richard Clark, Maria Navajas, Yves Van de Peer, Isabel Diaz, Felix Ortego, Rene Feyereisen, Vojislava Grbic **The genome of two spotted spider mite *Tetranychus urticae***. XXIV International Congress of Entomology, Deagu, **South Korea**, 19-25 August 2012.

Miodrag Grbic **The genome of the two spotted spider mite *Tetranychus urticae*: New model for plant-pest interactions**. 6th Annual Arthropod Genomics Symposium, Kansas City, **USA** May 30-Jun 2, 2012

Miodrag Grbic¹, Vladimir Zhurov¹, Stephane Rombauts², Jeffrey Hutter³ and Vojislava Grbic **Genomics in spider mites leads to new biomaterials**. 7th Symposium of the European Association of Acarologists, Vienna, **Austria**, July 9 to 13, 2012.

Miodrag Grbic¹, Vojislava Grbic¹, Maria Navajas², Richard Clark³, Thomas Van Leeuwen⁴, and Yves van de Peer⁵ **The genome organization of two spotted spider mite *Tetranychus urticae***. 7th Symposium of the European Association of Acarologists, Vienna, **Austria**, July 9 to 13, 2012.

Miodrag Grbic The genome of *Tetranychus urticae* reveals herbivorous pest adaptations. University of La Rioja, Logrono, **Spain** 2 December 2011.

M. Grbic^{1,2}, R. Clark³, M. Navajas⁴, V. Grbic^{1,2}, S. Rombauts⁵ & Y. van de Peer⁵ **The first chelicerate genome of a major agricultural pest, spider mite *Tetranychus urticae*, an emerging model for plant-herbivore interactions**, the XIII International Congress of Acarology, Recife, **Brazil**, 22-28 August, 2010.

Miodrag Grbic, Maria Navajas Vojislava Grbic 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.

Miodrag Grbic Polyembryony in parasitic wasps: evolution of a novel mode of development. **Accademia Nazionale Italiana di Entomologia**, Florence Italy 6 June 2008.

Steven Robbens, Pierre Rouzé, Miodrag Grbic and Yves Van de Peer The Genome of the Spider Mite *Tetranychus urticae* soon to be sequenced and annotated. **2nd Annual arthropod genomics symposium: New Insights from Arthropod Genomes**, Kansas City, USA April 11 - 13, 2008.

Cherise Poo, Johannes Mathieu, Richard Clark, Marcus Schmid, Miodrag Grbic, Vojislava Grbic Whole genome sequencing of the Two Spotted Spider Mite *Tetranychus urticae*: novel model for plant-herbivore interactions. **Joint Genome Institute. Third Annual US Department of Energy Joint Genome Institute User Meeting**, Walnut Creek, California, USA March 26-28 2008.

- Grbic M. *Tetranychus urticae*, novel model for plant-herbivore interactions. **FP 7 Consortium Meeting, CSIC, Madrid, Spain** January 22 2008.
- Grbic, M. Evolution of developmental novelties in Hymenoptera. **First European Evolution of Development Meeting**, Prague, Czech Republic, August 17-20, 2006.
- Grbic M. Evolution of developmental novelties. **Evolution of Development Meeting**, Venice, Italy, May 4-6, 2006.
- Khila A. Grbic M. RNAi gene silencing in two spotted spider mite, *Tetranychus urticae*. 2006 Annual CSZ Meeting: Edmonton May 2 - 6
- Grbic M. Evolution of arthropod development: from ancestral developmental program to developmental novelties. **Segmentation Meeting**, San Francisco, USA, July 27, 2005.
- Grbic M. Evolution of pattern formation in arthropods, **Second Canadian Developmental Biology Meeting**, Banff, Alberta, Canada, April 1-4, 2004.
- Grbic M. Polyembryony in parasitic wasps: evolution of a novel mode of development. 44th **Annual Drosophila Research Conference**, Washington DC, USA 24-28 March 2004.
- Peter Dearden, Cameron Donly, Miodrag Grbic Genomics of spider mite *Tetranychus urticae*: evolution of developmental mechanisms in Chelicerata. **Molecular Evolution meeting**, Sorento, Italy. June 13-16 2002.
- Peter Dearden, Cameron Donly and Miodrag Grbic Genomics of spider mite *Tetranychus urticae*: development of model chelicerate **First Canadian Developmental Biology Conference**, Mont Tremblant, Quebec p. A38. 4-7 April 2002.
- Peter Dearden, Cameron Donly and Miodrag Grbic Genomics of spider mite *Tetranychus urticae*: evolution of developmental mechanisms in Chelicerata. **Human Frontier Science Program Second Annual Awardees' Meeting** Ottawa, Canada p.55. June 9-12 2002.
- Grbic M. Evolution of pattern formation in insects: radical changes in development are associated with switch in the life history. **Hymenopteran Genetics and Development Meeting**, Washington DC, USA, March 24 2001.
- Grbic M. Evolution of pattern formation in insects: radical changes in development are associated with switch in the life history. **Developmental Gene Regulation and Mechanisms of Evolution meeting** (organized by NASA), Woods Hole, USA, June 10 1998.
- Grbic M. Evolution of development and changes in life history in insects. **Workshop on Development and Evolution** (organized by G. Morata and W. J. Gehring), Madrid, Spain, 3-5 November 1997.

Invited institutional presentations and seminars:

- Grbic M. Whole genome sequencing of *Tetranychus urticae* Koch: from pest genomics and biotechnology to new biomaterials. East Malling Research Institute, **UK** July 2013.
- Grbic M. Whole genome sequencing of *Tetranychus urticae*: novel system for plant-pest interactions. Institute for Biodiversity and Ecosystem Dynamics (IBED) University of Amsterdam. Holland February 25 2009.
- Grbic M. Evolution of arthropod development: from an ancestral developmental program to developmental novelties and biotechnology applications. University of Tubingen, **Germany** June 26 2008.
- Grbic M. Evolution of arthropod development: from an ancestral developmental program to developmental novelties and biotechnology applications. University of Innsbruck, **Austria** June 17 2008.

- Grbic M. Evolution of arthropod development: from ancestral developmental program to developmental novelties. University of Vienna, **Austria**, March 3 2008.
- Grbic M. New tools for biotechnology: Whole genome sequencing of spider mite *Tetranychus urticae*, major agricultural pest. Devgen, Biotech Company, Gent, **Belgium**, December 12 2007.
- Grbic M. Evolution of arthropod development: from ancestral developmental program to developmental novelties. Universidad Politécnica de Madrid, **Spain**, November 23 2007.
- Grbic M. Evolution of arthropod development: from ancestral developmental program to developmental novelties. University of Halle, **Germany**, July 17 2007.
- Grbic M. Evolution of arthropod development: from ancestral developmental program to developmental novelties. University of Gent, **Belgium**, June 11 2007.
- Grbic M. Evolution of arthropod development: from ancestral developmental program to developmental novelties. University of Lausanne, Department of Ecology and Evolution, **Switzerland**, November 21 2006.
- Grbic M. Evolution of arthropod development: from ancestral developmental program to developmental novelties. Institut de Recherche sur la Biologie de l'Insecte, Tours, **France** July 31 2006.
- Grbic M. Evolution of developmental mechanisms in arthropods. University of Reading, **UK**, July 5 2006.
- Grbic M. Evolution of arthropod development: from ancestral developmental program to developmental novelties. CNRS, Villefranche-sur-mer, **France**, June 15 2006.
- Grbic M. Evolution of arthropod development: from ancestral developmental program to developmental novelties. University of Nurnberg-Erlangen, Department of Biology, **Germany**, July 11 2005.
- Grbic M. Evolution of arthropod development: from ancestral developmental program to developmental novelties. University of Lausanne, Department of Ecology and Evolution, **Switzerland**, May 12 2005.
- Grbic M. Evolution of arthropod development: from ancestral developmental program to developmental novelties. Instituto Gulbenkian de Ciencia, Oeiras, **Portugal**, May 4 2005.
- Grbic M. Evolution of pattern formation mechanisms in arthropods. Centre de Biologie du Développement CNRS, Toulouse, **France**, October 30 2004.
- Grbic M. Evolution of axial patterning in arthropods, Department of Biology University of New York, New York, **USA**, October 11th 2004.
- Grbic M. Evolution of pattern formation mechanisms in arthropods, Department of Biology University of Maryland, Washington DC, **USA**, May 12th 2004.
- Grbic M. Evolution of pattern formation mechanisms in arthropods, Department of Biological Sciences University of Alberta, Edmonton, **Canada**, December 12th 2003.
- Grbic M. Evolution of early development in arthropods, Max Planck Institute for Developmental Biology, Tubingen, **Germany**, August 5th 2003.
- Grbic M. Evolution of early development in arthropods Carnegie Institution of Washington, Department of Embryology, Baltimore, **USA**, 10 February 2003.
- Grbic M. Pattern formation in parasitoids: evolution of developmental mechanisms associated with change in the embryonic environment. Dipartimento di Biologia-Universita' della Basilicata Potenza, **Italy**, June 18th 2002.
- Grbic M. Evolution of developmental mechanisms. Istituto Internazionale di Genetica e Biofisica Napoli, **Italy**, June 17 2002.

- Grbic M. Embryo cloning: Evolution of polyembryonic development. Institute for Molecular genetics and Genetic Engineering, University of Belgrade, **Yugoslavia** 27 February 2002
- Grbic M. Arthropod pattern formation in a cellularised environment: chelicerates and monoebryonic insects. Institute for Developmental Biology, University of Koeln, **Germany** 24 June 2001
- Grbic M Insect pattern formation in a cellularised environment: polyembryonic development. . Institute for Developmental Biology, University of Koeln, Germany 23 June 2001
- Grbic M. "Alien" wasps and evolution of development. Wayn State University **USA**, April 2 2001.
- Grbic M. Evolution of pattern formation in insects: radical changes in development are associated with switch in the life history. Duke University, **USA**, March 26 2001.
- Grbic M. "Alien" wasps and evolution of development. Universita Autonoma de Madrid, **Spain**, March 16 2000.
- Grbic M. "Alien" wasps and evolution of development, Biology Department University of Barcelona, **Spain**, March 13 2000.
- Grbic M. "Alien" wasps and evolution of development. Cornell University, **USA**, January 24 2000.
- Grbic M. Evolution of pattern formation in insects: Radical changes in development are associated with switch in the life history. McMaster University, Hamilton, **Canada**, November 26 1998.
- Grbic M. Evolution of pattern formation in insects: radical changes in development are associated with switch in the life history. University of Oxford, Zoology Department, **UK**, May 26 1998.
- Grbic M. Evolution of pattern formation in insects: radical changes in development are associated with switch in the life history. University of Leiden, Institute of Ecological and Evolutionary Sciences, **The Netherlands**, April 9 1998.
- Grbic M. Evolution of pattern formation in insects: radical changes in development are associated with switch in the life history. University of Utrecht, Department of Molecular Biology, **The Netherlands**, April 6 1998.

Grants:

Active:

- Funding agency: Global Leadership in genomics and Life Sciences (GL2) Ontario Ministry of Research and Innovation 2010, grant title: Pest Genomics and Plant Breeding in a sustainable agricultural pest management. M. Grbic PI. Budget: **\$1,977,514.00** CAD Period: 2011-2014.
- Funding agency: ADF-UWO; Biotron, Grbic, M., Grbic, V; **\$ 42,823**, Period: 2010-2011.
- Funding agency: **Genome Canada**; grant title: Genomics in Agricultural Pest Management (**GAP-M**); PI M. Grbic co PI: Y. van de Peer, M. Navajas, F. Ortego, I. Diaz, JM Zapater, V. Grbic; **\$6,390,093**, **2009-2013**.
- Funding agency: **Ontario Genome Institute**, grant title: "Genomics in Sustainable Agriculture", PI M. Grbic, amount: **\$8,784** period: 2010.
- Funding agency: Natural Sciences and Engineering Research Council of Canada, grant title: Evolution of pattern formation in insects applicants: (NSERC discovery grant) Miodrag Grbic PI, amount: **\$227,500** period: 2007-2012.
- Funding agency: DOE Community Sequencing Program
Grant title: Model Chelicerate genome: whole genome sequencing

of spider mite *Tetranychus urtica*. applicants: Miodrag Grbic PI, Co-PI: Maria Navajas INRA Montpellier, France, Jeffrey Boore DOE Joint Genome Institute and Lawrence Berkeley National Lab, Walnut Creek, USA, Lisa Nagy, University of Arizona, Tucson, USA, Andre Pires da Silva, University of Texas at Arlington, USA.
amount: US **\$2,800,000** Period: 2006-2009.

Funding agency: Natural Sciences and Engineering Research Council of Canada, grant title: Genetic pest control: plant-generated RNAi gene knockouts in agricultural pest (NSERC Strategic grant) applicants: Miodrag Grbic PI, V. Grbic co-PI amount: **\$435,000** period: 2005-2008.

Past grants:

Funding agency: Canadian Space Agency; grant title: Influence of environment on evolution of developmental programs in insects applicants: Miodrag Grbic PI. amount: **\$83,000** Period: 2007-2008.

Funding agency: Canadian Foundation for Innovation and Ontario Government Matching Fund. grant title: UWO Biotron (equipment grant) applicants: Norman Huner PI, Miodrag Grbic co-PI and seven others. amount: **\$28,371,122** Period: 2004-2007.

Funding agency: Natural Sciences and Engineering Research Council of Canada, grant title: Genomics of spider mite: development of a novel model organism (NSERC genomics grant) applicants: Miodrag Grbic PI, amount: **\$45,000/year**, period: 2002-2006.

Funding agency: Natural Sciences and Engineering Research Council of Canada, grant title: Evolution of pattern formation in insects (NSERC discovery grant), applicant: Miodrag Grbic PI, amount: **\$178,184**, period: 2002-2006.

Funding agency: Ontario Ministry of Energy, Science and Technology and Technology, grant title: Transgenic technology in biological pest control (Premier's Research Excellence Award), applicant: Miodrag Grbic PI, amount: **\$150,000**, period: 2000-2005.

Funding agency: Canadian Foundation for Innovation and Ontario Government Matching Fund. grant title: Molecular biology facility for embryo manipulation and genetic transformation (equipment grant) applicants: Miodrag Grbic PI, Vojislava Grbic co-PI, amount: **\$850,000** period: 1999.

Funding agency: Agriculture Canada, grant title: Biological Pest Control, applicant: Miodrag Grbic PI, amount: **\$2,000** period: 1998.

Funding agency: UWO Academic Development Fund, grant title: Laser-based embryo manipulation workstation (equipment grant), applicant: Miodrag Grbic PI and 5 others co-PIs, amount: **\$76,649**, period: 1998.

Funding agency: Natural Sciences and Engineering Research Council of Canada, grant title: Evolution of pattern formation in insects (NSERC discovery grant), applicant: Miodrag Grbic PI, amount: **\$132,000**, period: 1998-2001.

Funding agency: Natural Sciences and Engineering Research Council of Canada, grant title: Transgenic intracellular injection (NSERC equipment grant), applicants: Miodrag Grbic PI and 3 others co-PIs, amount: **\$64,084**, period: 1998.

Funding agency: National Science Foundation (USA), grant title: Caste determination in the polyembryonic wasp *Copidosoma floridanum* NSF competitive, applicants: Michael Strand PI, Miodrag Grbic co-PI amount: **\$450,000**, period: 1995-1998.

Refereed articles for following journals:

Development Genes and Evolution,
Heredity,
Current Biology
Proceedings National Academy of Sciences USA
Development
Nature Reviews Genetics
PLOS Biology
Science
Arthropod Structure and Development
Evolution&Development
Biocontrol
PLOS Genetics

Refereed grant proposals for following agencies:

The Biotechnology and Biological Science Research Council (BBSRC), UK
Royal Society, UK,
National Science Foundation (NSF), USA
National Science and Engineering Research Council (NSERC), Canada
Netherlands Organization for Scientific Research (NWO, the Dutch research council)
Netherlands Genomics Initiative, Horizon Breakthrough project grant
Agreen Skills grant program INRA France
FP7 program expert, evaluator, EU