

**CURRICULUM VITAE
OF
FERNANDO GABRIEL NORIEGA**



EDUCATION

<u>Degree</u>	<u>Institution</u>	<u>Field</u>	<u>Dates</u>
Ph.D.	National University of La Plata (Argentina)	Zoology	1987
BS	National University of La Plata (Argentina)	Zoology	1981

FULL-TIME ACADEMIC EXPERIENCE

<u>Institution</u>	<u>Rank</u>	<u>Field</u>	<u>Dates</u>
• Florida International University	Professor	Biology	(6/12-Present).
• Florida International University	Associate Professor	Biology	(7/07-6/12).
• Florida International University	Assistant Professor	Biology	(1/04-7/07).
• University of Arizona	Research Associate Professor	Biochemistry	(2/02-12/03)
• University of Arizona	Research Assistant Professor	Biochemistry	(10/94-1/02)
• Czech Acad. of Sciences	Visiting Scientist	Parasitology	(10/94-1/95)
• University of Arizona	Research Associate	Biochemistry	(6/92-9/94)
• University of Arizona	Research Associate	Insect Science	(6/89-5/92)
• Univ. La Plata (Argentina)	Post-Doctoral Res. Fellow	Zoology	(1/89-5/89)
• Univ. La Plata (Argentina)	Head of TA Lab	Animal Physiology	(6/88-5/89)
• Univ. La Plata (Argentina)	Doctoral Res. Fellow	Zoology	(4/81-12/88)

PART-TIME ACADEMIC EXPERIENCE

<u>Institution</u>	<u>Rank</u>	<u>Field</u>	<u>Dates</u>
Univ. La Plata (Argentina)	Adjunct Associate Professor	Zoology	(6/2003-7/2009)

NON-ACADEMIC EXPERIENCE

<u>Place of Employment</u>	<u>Title</u>	<u>Dates</u>
San Martin Public Hospital (La Plata, Arg.)	Lab. Technician	1/78-3/81
Northrup King Seed Company (France)	Field technician	5/77-9/77

EMPLOYMENT RECORD AT FIU

<u>Rank</u>	<u>Dates</u>
Professor of Biology	7/2012-present
Associate Professor of Biology	7/2007-7/2012
Assistant Professor of Biology	1/2004-7/2007

PUBLICATIONS IN DISCIPLINE

Refereed Publications

1. Ramirez, C.E., Nouzova, M., Benigni, P., Quirke, J.M., Noriega, F.G., Francisco Fernandez-Lima, F. (2016). Fast, ultra-trace detection of juvenile hormone III from mosquitoes using mass spectrometry. *Talanta*. 159: 371-8.
2. Villalobos-Sambucaro, MJ., Diambra, LA., Noriega, FG. Ronderos, JR. (2016) Allatostatin-c antagonizes the synergistic myostimulatory effect of allatotropin and serotonin in *Rhodnius prolixus* (Stal). *General and Comparative Endocrinology*. 233:1-7.
3. Zhu, J and Noriega FG (2016). The role of juvenile hormone in mosquito development and reproduction. *Advances in Insect Physiology*. Progress in Mosquito Research. Editor. Alex Raikhel. 51:93-113.
4. Mesquita, R. D. ...Noriega FG. , Nouzova, M., et al. (2015). The genome of *Rhodnius prolixus*, an insect vector of Chagas disease, reveals unique adaptations to hematophagy and parasite infection. *Proc Natl Acad Sci U.S.A.* 112(48):14936-14941.

5. Nyati, P., Rivera-Perez, C., and Noriega, FG. (2015). Negative feedbacks by isoprenoids on a mevalonate kinase expressed in the *corpora allata* of mosquitoes. PLoS ONE 10(11): e0143107. doi:10.1371/journal.pone.0143107
6. Areiza, M., Nouzova, M., Rivera-Perez, C., and Noriega FG (2015). 20-hydroxyecdysone stimulation of juvenile hormone biosynthesis by the mosquito *corpora allata*. Insect Biochemistry and Molecular Biology. 64:100-105.
7. Hernandez-Martinez, S., Rivera-Perez, C., Nouzova M., and Noriega. FG (2015) Coordinated changes in JH biosynthesis and JH hemolymph titers in *Aedes aegypti* mosquitoes. J. Insect Physiology. 72: 22-27.
8. De Loof, A., Marchal, E., Rivera-Perez, C., Noriega, FG., Schoofs, L. (2015) Farnesol-like endogenous sesquiterpenoids in vertebrates: the probable but overlooked functional "inbrome" anti-aging counterpart of juvenile hormone of insects? Frontiers in Endocrinology. doi: 10.3389/fendo.2014.00222.
9. Nouzova, M., Rivera-Perez, C., Noriega FG. (2015) Allatostatin-C reversibly blocks the transport of citrate out of the mitochondria and inhibits juvenile hormone synthesis in mosquitoes. Insect Biochemistry and Molecular Biology. 57: 20-26.
10. Wen, D., Rivera-Perez, C., Abdou, M., Jia, Q., He, Q., Zyaan, O., Bendena, WB., Tobe, SS., Noriega, FG., Palli, SR., Wang, J., Li, S. (2015) Methyl Farnesoate Plays a Dual Role in Regulating Drosophila Metamorphosis. PLoS Genet 11(3): e1005038. doi:10.1371/journal.pgen.1005038
11. Villalobos-Sambucaro MJ., Lorenzo-Figueiras, AN., Riccillo, FL., Diambra, LA., Noriega, FG., Ronderos, JR (2015). Allatotropin modulates myostimulatory and cardioacceleratory activities in *Rhodnius prolixus* (Stal). PLoS One. 2015 Apr 21;10(4):e0124131. doi: 10.
12. Rivera-Perez, C., Nyati, P., Noriega, FG. (2015) A *corpora allata* farnesyl diphosphate synthase in mosquitoes displaying a metal ion dependent substrate specificity. Insect Biochem Mol Biol. 64:44-50.
13. Noriega, FG. (2014) Juvenile hormone biosynthesis in insects: What is new, what do we know, what questions remain? ISRN. doi.org/10.1155/2014/967361
14. Rivera-Perez, C., Nouzova, M., Lamboglia, I. and Noriega FG. (2014) Metabolomics Reveals Changes in the Mevalonate and Juvenile Hormone Synthesis Pathways. Insect Biochemistry and Molecular Biology. 51: 1-9.

15. Rivera-Perez, C., Nouzova, M and Noriega, FG. (2014) New Approaches to Study Juvenile Hormone Biosynthesis in Insects. In: Short Views on Insect Biochemistry and Molecular Biology. Chapter 7. 185-216.
16. Chandrasekar, R., Brintha, PG., Park, EY., Pelsoi, P., Liu, F., Goldsmith, M., Ejiofor, A., Pittendrigh, BR., Han, YS., Noriega, FG., Sugumaran, M., Tyagi, BK., Zheng, Z., Zhu, GF., Patnaik, BB and Michailova, P. (2014) Introduction to Insect Molecular Biology. In: Short Views on Insect Biochemistry and Molecular Biology. Chapter 1. 3-56.
17. Areiza, M., Nouzova, M., Rivera-Perez, C., and Noriega FG (2014). Ecdysis triggering hormone ensures proper timing of juvenile hormone biosynthesis in pharate adult mosquitoes. *Insect Biochemistry and Molecular Biology*.54: 98-105.
18. Clifton M.E., Correa S, Rivera-Perez, C., Nouzova, M and Noriega, FG. (2014). Male *Aedes aegypti* mosquitoes use JH III transferred during copulation to influence previtellogenic ovary physiology and affect the reproductive output of female mosquitoes. *J Insect Physiology. Journal of Insect Physiology*. 64: 40-47.
19. Perez-Hedo, M., Rivera-Perez, C. and Noriega, FG. (2014) Starvation increases insulin sensitivity and reduces juvenile hormone synthesis in mosquitoes. *PLoS One* 9:e86183
20. Perez M., and Noriega, FG. (2014). The sub-lethal larval metal stress response of the Dengue Fever Mosquito. *Physiological Entomology*. 39:111-119.
21. Alzugaray, ME., Adami, ML, Diambra L., Hernandez-Martinez, S., Damborenea, C., Noriega, FG, Ronderos, JR. (2013). Allatotropin: an ancestral myotropic neuropeptide involved in feeding. *PLoS ONE* 8(10): e77520. doi:10.1371/journal.pone.0077520
22. Nyati, P., Nouzova, M., Rivera-Perez, C., Clifton, ME., Mayoral, JG and Noriega, FG. (2013). Farnesyl phosphatase, a corpora allata enzyme involved in juvenile hormone synthesis in *Aedes aegypti*. *PLoS ONE* 8(8): e71967. doi:10.1371/journal.pone.0071967
23. Rivera-Perez, C., Nouzova, M., Clifton, ME., Martin Garcia, E., LeBlanc, E., and Noriega, FG. (2013) Aldehyde Dehydrogenase 3 Converts Farnesal into Farnesoic Acid in the *Corpora Allata* of Mosquitoes. *Insect Biochem. Molec. Biol.* 43:675-682.
24. Perez-Hedo, M., Rivera-Perez, C. and Noriega, FG. (2013) The Insulin/TOR signal transduction pathway is involved in the nutritional regulation of juvenile hormone synthesis in *Aedes aegypti*. *Insect Biochem. Molec. Biol.* 43:495-500.

25. Perez M., and Noriega, FG. (2013) *Aedes aegypti* pharate 1st instar quiescence: A case for anticipatory reproductive plasticity. *Journal of Insect Physiology*. 59: 318-324.
26. Mayoral, JG., Leonard, KT., Defelipe, LA., Turjanski, AG. and Noriega, FG. (2013). Functional Analysis of a Mosquito Short Chain Dehydrogenase Cluster. *Archives of Insect Biochemistry and Physiology*. 82:96-115.
27. Rivera-Perez, C., Nouzova, M and Noriega, FG. (2012) A quantitative assay for juvenile hormones and their precursors using fluorescent tags. *PLoS ONE* 7(8): e43784. doi:10.1371/journal.pone.0043784.
28. Diaz, M., Mayoral, JM., Priestap, H., Nouzova, M., Rivera-Perez, C., Noriega, FG. (2012). Characterization of an Isopentenyl Diphosphate Isomerase involved in the Juvenile Hormone pathway in *Aedes aegypti*. *Insect Biochem. Molec. Biol.* 42: 751-757.
29. Clifton M.E. and Noriega, FG. (2012). The fate of follicles after a blood meal is dependent on previtellogenic nutrition and juvenile hormone in *Aedes aegypti*. *Journal of Insect Physiology* 58: 1007–1019.
30. Perez M., and Noriega, FG (2012). *Aedes aegypti* pharate 1st instar quiescence affects larval fitness and metal tolerance. *Journal of Insect Physiology*. 58: 824-829.
31. Nouzova, M., Mayoral, J.M, Brockhoff, A Goodwin, M., Meyerhof, W. and Noriega F.G (2012). Functional characterization of an allatotropin receptor expressed in the corpora allata of mosquitoes. *Peptides*. 34:201-208.
32. Sanborn AF, Heath, JE, Phillips PK, Heath MS, and Noriega FG (2011) Thermal adaptation and diversity in tropical ecosystems: Evidence from Cicadas (Hemiptera, Cicadidae). *PLoS One*. 6 (12) :e29368. Epub 2011 Dec 29.
33. Clifton M.E. and Noriega, FG. (2011) Nutrient limitation results in juvenile hormone-mediated resorption of previtellogenic ovarian follicles in mosquitoes. *Journal of Insect Physiology* 57: 1274-1281.
34. Nouzova, M., Edwards M., Mayoral J.M., Noriega, FG (2011) A coordinated expression of biosynthetic enzymes controls the flux of juvenile hormone precursors in the corpora allata of mosquitoes. *Insect Biochemistry and Molecular Biology* 41: 660-669.

35. Defelipe, L.A, Dolghih E, Roitberg A.E., Nouzova M., Mayoral J.G, Noriega F.G and Turjanski, A.G. (2011). Juvenile Hormone Synthesis: “esterify then epoxidize” or “epoxidize then esterify”? Insights from the Structural Characterization of Juvenile Hormone Acid Methyltransferase. *Insect Biochemistry and Molecular Biology*. 41: 228-235.
36. Navare A., Mayoral, J.G., Nouzova, M., Noriega, F.G., Fernández, F.M. (2010) Rapid Direct Analysis in Real-Time (DART) Mass Spectrometric Detection of Juvenile Hormone (JH) III and its Terpene Precursors. *Analytical & Bioanalytical Chemistry*. 398:3005-3013.
37. Mayoral, J.G., Nouzova, M., Brockhoff, A., Goodwin, M., Hernandez-Martinez, S., Richter, D., Meyerhof, W and Noriega, F.G. (2010). Allatostatin-C receptors in mosquitoes. *Peptides*, 31: 442-450
38. Jaime G. Mayoral, Francisco J. Alarcón, Tomás F. Martínez, Pablo Barranco and F.G. Noriega (2010) An improved End-Point Fluorimetric Procedure for the Determination of Low Amounts of Trypsin Activity in Biological Samples Using Rhodamine-110-Based Substrates. *Applied Biochem Biotechnology*. 160:1-8
39. Mayoral, J.G, Nouzova, M., Navare, A. and Noriega, F.G (2009) NADP⁺-dependent farnesol dehydrogenase, a *corpora allata* enzyme involved in juvenile hormone synthesis *PNAS*, 106: 21091-21096
40. Mayoral, J.G., Nouzova, M., Michiyo Yoshiyama, Tetsuro Shinoda, Salvador Hernandez-Martinez, Elena Dolghih, Adrian G. Turjanski, Adrian E. Roitberg, Horacio Priestap, Mario Perez, Lucy Mackenzie, Yiping Li, and Fernando G. Noriega (2009) Molecular and functional characterization of a juvenile hormone acid methyltransferase expressed in the corpora allata of mosquitoes. *Insect Biochemistry Molecular Biology*. 39: 31-37.
41. Navare A., Nouzova, M., Fernando G. Noriega, Salvador Hernández-Martínez, Christoph Menzel, Facundo M. Fernández (2009) On-Chip Solid-phase Extraction Preconcentration/Focusing Substrates Coupled to Atmospheric Pressure Matrix-Assisted Laser Desorption/Ionization Ion Trap Mass Spectrometry for High Sensitivity Neuropeptide Detection and Protein Identification *Rapid Communications in Mass Spectrometry* 23: 477-486.
42. Berry, J.P., Gantar, M., Perez, M.H., Berry, G., and Noriega F.G. (2008) Cyanobacterial Toxins as Allelochemicals with Potential as Algacides, Herbicides and Insecticides. *Marine drugs* 6: 117-146.
43. Navare, A., Zhou, M., McDonald, J., Noriega, F.G., Sullards, C. and Fernandez, F.M. (2008) Serum Biomarker Profiling by Solid-Phase Extraction with Particle-

Embedded Micro Tips and Matrix-Assisted Laser Desorption/Ionization Mass Spectrometry. *Rapid Communications in Mass Spectrometry* 22:997-1008.

44. Martinez-Hernandez, S., Mayoral, J.G., Li, Y. and Noriega, F.G. (2007). Role of Juvenile hormone and allatotropin on nutrient allocation, ovarian development and survivorship in mosquitoes. *J. Insect Physiology* 53:230-234
45. Li, Y., Martinez-Hernandez, S., Fernandez, F., Mayoral, J.G., Topalis, P., Priestap, H., Perez, M., Navarete, A., and Noriega, F.G. (2006). Biochemical, molecular and functional characterization of PISCF-allatostatin, a regulator of juvenile hormone biosynthesis in the mosquito *Aedes aegypti*. *J. Biological Chemistry* 281: 34048-34055.
46. Noriega, F.G., Ribeiro, J.M.C., Koener, J.F., Valenzuela, J.G., Hernandez-Martinez, S., Pham, V.M and Feyereisen, R. (2006) Comparative genomics of insect juvenile hormone biosynthesis. *Insect Biochem. Molec. Biol.* 36: 366-374.
47. Telang, A., Li, Y., Noriega F.G., and Brown M.R. (2006) Effects of larval nutrition on the endocrinology of mosquito egg development. *J. Experimental Biology* 209, 645-655.
48. Hernandez-Martinez, S., Li, Y., Rodriguez, M.H., Lanz-Mendoza H. and Noriega, F.G. (2005). Allatotropin and PISCF- and YXFGL-amide-allatostatins distribution in *Aedes aegypti* and *Anopheles albimanus* mosquitoes. *Cell Tissue Research* 321:105-113.
49. Caroci, A., Li, Y. and Noriega, F.G. (2004). Reduced juvenile hormone synthesis in mosquitoes with low teneral reserves prevents ovarian previtellogenic development in *Aedes aegypti*. *J. Experimental Biology* 207:2685-2690.
50. Noriega, F.G (2004) Nutritional regulation of JH synthesis: a mechanism to control reproductive maturation in mosquitoes? *Insect Biochem Molec. Biol.* 34:687-693.
51. Sanborn, A.F., Heath, M.S., Heath, J.E., Noriega, F.G. and Phillips, P.K. (2004) Convergence and Parallelism Among Cicadas of Argentina and the Southwestern United States (Hemiptera: Cicadoidea). *J. Zoology Linnean Society* 83: 281-288.
52. Li, Y., Martinez-Hernandez, S. and Noriega, F.G. (2004). Inhibition of juvenile hormone biosynthesis in mosquitoes: effect of allatostatic head-factors, PISCF- and YXFGL-amide-allatostatins. *Regulatory peptides* 118: 175-182.

53. Caroci, A. and Noriega, F.G. (2003) Free amino acids are important for the retention of protein and non-protein meals by the midgut of *Aedes aegypti* females. *J. Insect Physiology* 49: 839-844.
54. Li, Y., Kuwano, E. and Noriega F.G. (2003) 1,5-disubstituted imidazoles inhibit juvenile hormone biosynthesis by the *corpora allata* of the mosquito *Aedes aegypti*. *J. Insect Physiology* 49: 1005-1011.
55. Li, Y., Unnithan, C., Martinez-Hernandez, S., Feyereisen, R. and Noriega, F.G. (2003) Activity of the *corpora allata* of adult female *Aedes aegypti*: effects of mating and feeding. *Insect Biochem Molec. Biol.* 33: 1307-1315.
56. Li, Y., Unnithan, C., Veenstra J., Feyereisen, R. and Noriega, F.G. (2003) Stimulation of Juvenile hormone biosynthesis by the *corpora allata* of adult *Aedes aegypti* *in vitro*: effect of farnesoic acid and *Aedes* allatotropin. *J. Experimental Biology*, 206: 1825-1832.
57. Noriega, F.G., Edgar, K.A., Bechet, R. and Wells, M.A. (2002) Midgut exopeptidase activities in *Aedes aegypti* are induced by blood feeding. *J. Insect Physiology* 48: 65-72.
58. Sanborn, A.F., Noriega, F.G. and Phillips, P.K (2002) Thermoregulation in the cicada *Platypedia putnami* variety *lutea* (Homoptera: Tibicinidae) and a test of a crepitation hypothesis. *J. Thermal Biology* 27(5): 365-369.
59. Noriega, F.G., K. A. Edgar, D. K. Shah and M. A. Wells. (2001) Neuroendocrine factors affecting the steady state levels of early trypsin mRNA in *Aedes aegypti* . *J. Insect Physiology*. 47, 515-522.
60. Edgar, K., Noriega, F.G., B. C. Bonning and M. A. Wells (2000). Recombinant juvenile hormone esterase, an effective tool to modify juvenile hormone-dependent expression of the early trypsin gene in mosquitoes. *Insect Molec. Biol.* 9, 27-31.
61. M.J. Edwards, L.A. Moskalyk, M. Donnelly-Doman, M. Vlaskova, Noriega, F.G., V.K.Walker and M. Jacobs-Lorena. (2000) Characterization of a carboxypeptidase A gene from the mosquito, *Aedes aegypti* *Insect Molec. Biol.* 9, 33-38
62. Noriega, F.G., A. E. Colonna and M. A. Wells (1999). Increase in the size of the amino acid pool is sufficient to activate translation of early trypsin mRNA in *Aedes aegypti* midgut. *Insect Biochem Molec. Biol.* 29, 243-247.

63. Noriega, F.G. and M. A. Wells (1999). A molecular view of protein-meal digestion in the yellow fever mosquito *Aedes aegypti* J. Insect Physiol. 45, 613-620.
64. Noriega, F.G., D. Shaa and M. Wells (1997) Juvenile Hormone controls early trypsin gene expression in the midgut of *Aedes aegypti*. Insect Molecular Biology 6: 63-66.
65. Q. Jiang, M. Hall, Noriega, F.G. and M. Wells (1997) cDNA cloning and pattern of expression of an Adult, female-specific chymotrypsin from *Aedes aegypti* midgut. Insect Biochemistry and Molec. Biol. 27: 283-289
66. J.A. Veenstra, Noriega, F.G., R. Graf and Feyereisen R. (1997) Identification of three allatostatins and their cDNA from the mosquito *Aedes aegypti*. Peptides. 18:937-942.
67. Noriega, F.G., J. E Pennington, C. Barillas-Mury, X-Y. Wang and M. Wells (1996). Early trypsin, an *Aedes aegypti* female specific protease, is post-transcriptionally regulated by the blood meal. Insect Molec. Biol. 5:25-29.
68. Noriega, F.G., X-Y. Wang, J. E. Pennington, C. Barillas-Mury, and M. Wells (1996). Early trypsin, a female-specific midgut protease in *Aedes aegypti*: isolation, amino-terminal sequence determination, and cloning and sequencing of the gene. Insect Biochem. Molec. Biol. 26:119-126.
69. Barillas-Mury, Noriega, F.G. and M. Wells (1995). Early trypsin activity is part of the signal transduction that activates transcription of late trypsin in the midgut of the mosquito *Aedes aegypti*. Insect Biochem. Mol. Biol. 25:241-246.
70. A.F. Sanborn, J.E. Heath, M.S. Heath and Noriega, F.G. (1995). Thermoregulation by endogenous heat production in two south american grass dwelling cicadas (Homoptera: Cicadidae: *Proarna*). Florida Entomologist 78: 319-328.
71. A.F. Sanborn, M.S. Heath, J.E. Heath and Noriega, F.G. (1995) Diurnal activity, Temperature responses and Endothermy in three South American cicadas (Homoptera : Cicadidae: *Dorisiana bonaerensis*, *Quesada gigas* and *Fidicina mannifera*). J. Therm. Biol. 20:451-460.
72. Noriega, F.G., C. Barillas-Mury and M. Wells (1994). Dietary control of late-trypsin gene transcription in *Aedes aegypti*. Insect Biochem. Molec. Biol. 24(6): 627-631.
73. Noriega, F.G., and M. Wells (1993). A comparison of three methods to isolate RNA from mosquitoes. Insect Mol. Biol. 2(1): 21-24.

74. Noriega, F.G. and M. Wells (1992). Oxygen-Carrying Perfluorochemicals Emulsions Improve Fat Body Culture Performance. *Insect Biochem. Molec. Biol.* 22:6, 585-590.
75. Noriega, F.G. (1992). Autogeny in three species of Triatominae: *Rhodnius prolixus*, *Triatoma rubrovaria* and *Triatoma infestans*. *J. Med. Entomology* 29(2):273-277.
76. Stoka, A.M. and Noriega, F.G. (1982). Ecdysteroids: Biochemical mechanism of 20-OH-ecdysone inactivation in *Triatoma infestans* (Hemiptera, Reduviidae). *Acta Physiol. Latinoam.* 32, 321-329.

Books Chapters

1. Rivera-Perez, C., Nouzova, M and Noriega, FG. (2014) New Approaches to Study Juvenile Hormone Biosynthesis in Insects. In: *Short Views on Insect Biochemistry and Molecular Biology*. Chapter 7. 185-216.
2. Chandrasekar, R., Brintha, PG., Park, EY., Pelsoi, P., Liu, F., Goldsmith, M., Ejiofor, A., Pittendrigh, BR., Han, YS., Noriega, FG., Sugumaran, M., Tyagi, BK., Zheng, Z., Zhu, GF., Patnaik, BB and Michailova, P. (2014) Introduction to Insect Molecular Biology. In: *Short Views on Insect Biochemistry and Molecular Biology*. Chapter 1. 3-56.
3. Isoe, J, Noriega, F. G. and Wells, M. A. (2005) Genomics and Gene Expression in Vectors in (Marquardt WC, Black WC, Freier J, Hagedorn H, Hemingway J, Higgs S, James AA and Kondratieff, Eds.) "Biology of Disease Vectors", 2nd ed., Elsevier, 551-563.
4. Stoka, A.M., D. Salomon and Noriega, F.G. (1987). Reproductive Physiology of Triatominae in Chagas Disease Vectors, Ed. R.R. Brenner, CRC press Florida. 110-124.

INVITED SEMINARS

2016

1. Invited speaker, Oswaldo Cruz. Belo Horizonte, Brazil, February 2016.

2015

2. Invited speaker, Center for Parasite and Vector Studies. La Plata, Argentina, March 2015.
3. Invited Keynote speaker, Insect Biotech Conference, St Catharines, Canada, June 2015.

2014

4. Invited speaker, Shanghai Institute of Plant Physiology and Pathology. Shanghai, China, July 2014.
5. Invited speaker, China Agricultural University. Beijing, China, July 2014
6. Invited Speaker, School of public health and tropical medicine. Tulane University. New Orleans. September 2014.

2013

7. Invited Keynote speaker, EMBO meeting on Molecular and Population Biology of Disease vectors Kolymbari, Crete, Greece. August 2013.
8. Invited speaker, Annual Meeting of American Entomological Society. Austin, TX. November 2013.

2012

9. Invited Keynote speaker, International Symposium on Arthropod and Helminth Science, Ilha Grande, Brazil. August 2012.
10. Invited Seminar HHMI, New Mexico State University, Las Cruces, NM, September 2012.

2011

11. Invited speaker, 6th International Symposium on Molecular Insect Science, Amsterdam, The Netherlands. October 2011.
12. Invited speaker, International Conference on Tropical Medicine. Miami, June 2011.
13. Invited seminar Department of Biological Chemistry, University of Buenos Aires, Argentina, May 2011.
14. Invited seminar Center of Genomic Studies, University of La Plata, Argentina, May 2011.

2010

15. Invited Seminar National Institute of Health, Cuernavaca, Mexico, December 2010
16. Invited speaker, Symposium on Biological Research. Center of Biological Research. University of Antioquia. Colombia, November 2010.
17. Invited Keynote speaker, Symposium on Science Salutation, University of El Rosario. Bogota. Colombia, November 2010.

18. Invited speaker Seminar series Fralin Life Science Institute, Virginia Tech University, September 2010.
19. Invited Seminar, Northwestern Research Center (CIBNOR), La Paz, BCS, Mexico, August, 2010.

2009

20. Invited Speaker University of Florida, Department of Entomology Seminar Series, March 2009

2008

21. Invited speaker Symposium Signaling in Insects, Brazilian Congress of Protozoology and Chagas Disease, October 2008.
22. Invited speaker. Department of Biochemistry. Universidad Federal do Rio de Janeiro, Brazil, October 2008.
23. Invited speaker MIT, Department of Biology Seminar, Boston, May 2008.
24. Invited speaker. University of Almeria, Department of Biology, Spain. July 6.

2007

25. Invited seminar Institute of Entomology, Czech Academy of Sciences, Czech Republic,
26. Invited speaker Universidad Nacional del Sur, Bariloche, Argentina,

2006

27. University of Almeria, Department of Biology, Spain. July 6. Invited seminar. Title: Regulation of JH synthesis in mosquitoes.
28. Invited Speaker University of Georgia, Department of Entomology, USA. February 27. Invited seminar. Title: Nutritional regulation of JH synthesis in mosquitoes.
29. Invited Speaker University of Riverside, Center for Disease-Vector research, USA. February 3. Invited seminar. Title: Nutritional regulation of JH synthesis in mosquitoes.

2005

30. Invited speaker: International Symposium on Genetic Resources and Functional Studies in Insects. Tsukuba, Japan. March 9. Title: Physiological, genomic and proteomic approaches to study the mosquito neuroendocrine system.
31. National Institute of Health, Tokyo, Japan. March 7. Invited seminar. Title: Nutritional regulation of JH synthesis in mosquitoes.
32. University of Saga, Department of Biology, Japan. March 1. Invited seminar. Title: Nutritional regulation of JH synthesis in mosquitoes.

2003

33. Universidad Nacional de La Plata, College of Natural Sciences, La Plata, Argentina. November 12. Invited seminar. Title: Regulation of JH synthesis in mosquitoes.

34. Universidad Nacional del Sur, Department of Biology, Bariloche, Argentina. November 8. Invited seminar. Title: Regulation of JH synthesis in mosquitoes.
35. University of Barcelona, Molecular Biology Institute, Barcelona. Spain. September 2. Invited seminar. Title: Regulation of JH synthesis in mosquitoes.
36. Center for Biological Research, Madrid. Spain. August 29. Invited seminar. Title: Regulation of JH synthesis in mosquitoes.
37. University of Almeria, Department of Biology, Almeria, Spain. August 26. Invited seminar. Title: Regulation of JH synthesis in mosquitoes.
38. Florida International University, Department of Biology, USA. March 13. Invited seminar. Title: Digestion of the blood meal and nutritional regulation of JH synthesis in mosquitoes.
39. Kansas State University, Department of Biology, USA. February 26. Invited seminar. Title: Digestion of the blood meal and nutritional regulation of JH synthesis in mosquitoes.
40. Boston College, Department of Biology, USA. January 30. Invited seminar. Title: Digestion of the blood meal and nutritional regulation of JH synthesis in mosquitoes.

2002

41. Chinese Academy of Sciences, Beijing, China. October 15. Invited seminar. Title: Regulation of JH synthesis in mosquitoes.
42. Invited speaker symposium: Arthropod adaptations for Hematophagy. September 16. Meeting of the Society of Vector Ecologists, Albuquerque, USA. Title: Blood-meal digestion in mosquitoes.

2001

43. Barry University, Department of Biology, Miami, USA. November 19. Invited Seminar. Title: Studying enzymes and hormones in mosquitoes: can we learn something to control mosquitoes?
44. CINVESTAD, Center of Advanced Studies, Mexico DF, Mexico. October 19. Invited seminar. Title: Digestion of the blood meal and nutritional regulation of JH synthesis in mosquitoes.
45. National Institute of Health, Cuernavaca, Mexico. October 16. Invited seminar. Title: Digestion of the blood meal and nutritional regulation of JH synthesis in mosquitoes.
46. Max Planck Institute, Goettingen, Germany. June 7. Invited Seminar. Title: A molecular view of trypsin synthesis in the midgut of *Aedes aegypti*.
47. Northwestern Research Center (CIBNOR), La Paz, Baja California Sur, Mexico. February 16. Invited seminar. Title: A transgenic mosquito that does not transmit Malaria: science or science fiction?
48. Naresuan University Department of Parasitology, Phitsanulok, Thailand. January 23. Invited Seminar. Title: A transgenic mosquito that does not transmit Malaria: science or science fiction?

2000

49. University of Sao Paulo, Department of Parasitology, Sao Paulo, Brazil. September 15. Invited seminar. Title: A molecular view of trypsin synthesis in *Aedes aegypti*.
50. Universidad Nacional de La Plata, College of Natural Sciences., La Plata, Argentina. September 7. Invited Seminar. Title: Sintesis de proteasas y peptidasas en el intestino del mosquito: fisiologia, bioquimica y biologia molecular.
51. Universidad Nacional de Cordoba, Department of Biochemistry, Argentina. August 24. Invited Seminar. Title: Sintesis de proteasas y peptidasas en el intestino del mosquito: fisiologia, bioquimica y biologia molecular.
52. Northwestern Research Center (CIBNOR), La Paz, BCS, Mexico. January 25. Invited seminar. Title: Digestion of the blood meal and nutritional regulation of JH synthesis in mosquitoes.

1999

53. University of Aberdeen, Department of Biology, Aberdeen, Scotland. October 1. Invited Seminar. Title: A molecular view of trypsin synthesis in the midgut of *Aedes aegypti*.
54. University of Keele, Department of Parasitology, Keele, England. September 27. Invited Seminar. Title: A molecular view of trypsin synthesis in the midgut of *Aedes aegypti*.
55. University of Wales, Department of Biology, Bangor, Wales. September 23. Invited Seminar. Title: A molecular view of trypsin synthesis in the midgut of *Aedes aegypti*.
56. University of Oxford, Institute of Virology, Oxford, England. September 20. Invited Seminar. Title: A molecular view of trypsin synthesis in the midgut of *Aedes aegypti*, implications for pathogen transmission.
57. Imperial College, Department of Biology, London, England. September 16. Invited Seminar. Title: A molecular view of trypsin synthesis in the midgut of *Aedes aegypti*.
58. Institute of Parasitology, Czech Academy of Sciences, Ceske Budejovice, Czech Republic. September 7. Invited Seminar. Title: A molecular view of trypsin synthesis in the midgut of *Aedes aegypti*.
59. University of Arizona, Department of Entomology. USA. April 15. Invited Seminar Title: Nutritional regulation of JH synthesis: searching for answers in the mosquito midgut.

1998

60. University of Mar del Plata, Department of Zoology, Mar del Plata, Argentina. February 11. Invited Seminar. Title: Regulacion de expresion de genes de tripsina en mosquitos.

1997

61. National Institute of Health, Cuernavaca, Mexico. July 4. Invited Seminar. Title: Regulacion de genes de tripsina en el mosquito *Aedes aegypti*: 2 enzimas trabajan mejor y cuestan menos.

62. CINVESTAD, Center of Advanced Studied, Mexico DF, Mexico. July 2. Invited Seminar. Title: Regulacion de genes de tripsina en el mosquito Aedes aegypti: 2 enzimas trabajan mejor y cuestan menos.

1995

63. Campomar Institute of Biochemical Research, Buenos Aires, Argentina. May 4. Invited Seminar. Title: Estudio de los genes de tripsina en mosquitos.
64. Universidad Nacional de La Plata, College of Natural Sciences, La Plata, Argentina. April 25. Invited Seminar. Title: Regulacion de genes de tripsina en el mosquito Aedes aegypti.

1994

65. University of Stockholm, Department of Zoology, Stockholm, Sweden. November 15. Invited Seminar. Title: Smart blood meal digestion in mosquitoes, two trypsins cost less than one
66. Institute of Parasitology, Czech Academy of Sciences, Ceske Budejovice, Czech Republic. October 25. Invited Seminar. Title: Regulation of trypsin gene expression in the mosquito Aedes aegypti: two trypsins do a better job and cost less.

TEACHING EXPERIENCE IN INTERNATIONAL COURSES

1. *International Course on Biology of Disease Vectors*, Macae, Brazil, July 2012.
2. *International Course on Biology of Disease Vectors*, Manaus, Brazil, June 1-16, 2007. Sponsored by Fio-Cruz, and the UNDP/World Bank/WHO Special Program for Research and Training in Tropical Diseases (TDR).
3. *Summer School on Vector Biology*, University of South Bohemia, Ceske Budejovice, Czech Republic, June 20-25, 2005.
4. *International Course on Insect Molecular and Cell Biology*. March 1-12, 2004. Center for Genomic Studies. Universidad Nacional de La Plata, Argentina.
5. *International Course on Biology of Disease Vectors*, Cuernavaca, Mexico, June 14-29, 2003. Sponsored by the John D. and Catherine T. MacArthur Foundation, the Howard Hughes Medical Institute, and the UNDP/World Bank/WHO Special Program for Research and Training in Tropical Diseases (TDR).
6. Post-graduate course: *New approaches in Insect research: functional genomic and proteomic studies*. (co-Director). Universidad Nacional de La Plata, Argentina, November 2002.
7. *International Course on Biology of Disease Vectors*, Ceske Budejovice, Czech Republic, June 2001. Sponsored by the John D. and Catherine T. MacArthur

- Foundation, the Howard Hughes Medical Institute, and the UNDP/World Bank/WHO Special Program for Research and Training in Tropical Diseases (TDR).
8. *Proteases in Invertebrates* (Director). Northwestern Research Center (CIBNOR), La Paz, BCS, Mexico, February 2001.
 9. *Biochemistry and Molecular Biology of Vectors*. (co-Director) Universidad Nacional de Cordoba, Argentina, September 2000.

CONTRIBUTED PAPERS AND PAPERS IN INTERNATIONAL SCIENTIFIC
MEETINGS

(Selected list)

2016

1. Oral: Invertebrate Neuropeptide conference, Ouro Preto, Brazil. February 2016.

2015

2. Oral: Juvenile hormone synthesis in mosquitoes. Fernando G. Noriega. EMBO meeting on Molecular and Population Biology of Disease vectors Kolymbari, Crete, Greece. July 2015.
3. Poster: Juvenile Hormone biosynthesis in mosquitoes: Keystone Symposium. Taos, New Mexico, USA. May 2015.
4. Oral: Invertebrate Neuropeptide conference, Bagan, Myamar. February 2015.

2014

5. Oral Presentation 10th International Juvenile Hormone Meeting, Tsukuba, Japan. June 2014
6. Oral Presentation. 6th International Symposium on Molecular Insect Science, Amsterdam, The Netherlands. July 2014.
7. Oral Presentation. Entomological Society of America 62nd annual meeting. Portland Oregon. November 2014.
8. Oral Invertebrate Neuropeptide conference, El Calafater. Argentina February 2014

2013

9. Oral Presentation Entomological Society of America 61st annual meeting. Austin, Texas. November 2013.
10. Oral Presentation: Invertebrate Neuropeptide conference, Krabi. Thailand February 2013.
11. Oral Presentation: Triatomine Genomics and Biology. La Plata. Argentina. June 2013.

2012

1. Oral: Juvenile Hormone Undressed. Noriega, FG. XXIV International meeting of Entomology, Dageau, South Korea. August, 2012
2. Oral: Juvenile Hormone synthesis in Mosquitoes and *Rhodnius*. Noriega FG. Triatomine Genomics and Biology. La Plata. Argentina. May 16-18, 2012.
3. Oral: Regulation of JH synthesis in mosquitoes. Noriega FG. Invertebrate Neuropeptide conference, Atacama, Chile. February 2012

2011

4. Oral: Neuropeptides and regulation of JH synthesis in mosquitoes. Noriega FG. Invertebrate Neuropeptide conference, Malaysia.
5. Oral: The juvenile hormone synthesis pathway in mosquitoes. Fernando G. Noriega. EMBO meeting on Molecular and Population Biology of Disease vectors Kolymbari, Crete, Greece.
6. Oral: neuropeptides and juvenile hormone synthesis regulation in mosquitoes. Marcela Nouzova, Salvador Hernandez-Martinez, Jaime Mayoral Garcia and Fernando Noriega. EMBO meeting on Molecular and Population Biology of Disease vectors Kolymbari, Crete, Greece.

2010

7. Oral: Allatoregulatory peptides and immune response in *Anopheles albimanus*. Sanchez-Zavaleta, M; Contreras Garduno, J; Herrera-Ortiz, A; Lanz-Mendoza, H; Noriega FG and Martinez-Hernandez S. Congreso Mexicano de Inmunología, Cancun, Mexico.
8. Poster: Does 20-hydroxyecdysone play a role in the regulation of juvenile hormone titers in mosquito? 18th Ecdysone congress. Czech Republic.
9. Oral: Thermal Niche Separation and Diversity in Tropical Ecosystems: Evidence from Cicada Thermal Responses. Sanborn A. F. Heath J. E., Phillips P. K., Heath M. S., & Noriega F. G. 13th Auchenorrhyncha Congress. Vaison-la-Romaine, France.
10. Poster: Cyanobacteria toxins: novel insecticides for disease vector control. Berry, J., Berry J and Noriega FG. Meeting of the American Society of Pharmacognosy and the Phytochemical Society.

2009

11. Oral: Neuropeptides and nutritional regulation of juvenile hormone synthesis in mosquitoes. Noriega, FG. Invertebrate Neuropeptide Conference, Khajuraho, India.
12. Oral: Metal Toxicity in the Yellow Fever Mosquito (*Aedes aegypti*): A model of disease vector adaptation to polluted urban environments. Perez. M. and Noriega FG. Biomedical and Comparative Immunology Symposium. FIU.
13. Poster: Cyanobacteria toxins: novel insecticides for disease vector control. Jerry A. Berry, John Berry, and Fernando Noriega. American Chemical Society. Kissimmee , FL.

14. Oral: Regulation of juvenile hormone synthesis in mosquitoes. Marcela Nouzova, Jaime Mayoral and Fernando Noriega. EMBO meeting on Molecular and Population Biology of Disease vectors Kolymbari, Crete, Greece
15. Poster: Mosquito short chain alcohol dehydrogenases and juvenile hormone synthesis. Kate Leonard, Jaime Mayoral, Marcela Nouzova and Fernando Noriega. Annual Biomedical Research Conference for Minority Students (ABRCMS). Phoenix (AZ).

2008

16. Oral: Corazón de mosquito: un nuevo órgano de defensa innata, con participación importante en la eliminación de parásitos de malaria. Salvador Hernández-Martínez, Fernando Noriega, Arti Navarre, Facundo Fernandez, Mario H. Rodríguez and Humberto Lanz. XVIII Congreso Mexicano de Inmunología. Oaxaca, Mexico.
17. Oral: Increased Sensitivity for Neuropeptide Analysis by Atmospheric Pressure Matrix-Assisted Laser Desorption/ Ionization (AP-MALDI) with Dynamic On-chip Preconcentration/Focusing Targets. Arti Navare, Marcela Nouzova, Fernando Noriega, Salvador Hernández-Martínez, Facundo M. Fernández. ASMS 2008 conference, Denver, Co.
18. Oral: Aplicación de nanocristales fluorescentes para el estudio de la distribución de neuropéptidos en el mosquito *Aedes aegypti*. Hernandez-Martínez Salvador, Vinod Subramaniam y Fernando G. Noriega. Asociación Mexicana de Microscopía. Mexico City.

2007

19. Oral: Regulation of JH synthesis in Mosquitoes. Noriega, FG. Ninth International Juvenile Hormone Congress, York, UK.
20. Poster: Allatoregulatory peptides in Mosquitoes. Mayoral, JG., Nouzova, M., Noriega, FG. Ninth International Juvenile Hormone Congress, York, UK.
21. Poster: Characterization of JH biosynthetic enzymes in *Aedes aegypti*. Nouzova, M., Mayoral, JG., Noriega, FG. Ninth International Juvenile Hormone Congress, York, UK.
22. Oral: Regulation of JH synthesis in mosquitoes. Noriega, FG. EMBO meeting on Molecular and Population Biology of Disease vectors Kolymbari, Crete, Greece.
23. Oral: Role of mosquito pericardial cells during the response against pathogens and malaria parasites. Hernandez-Martinez, S., Noriega, F.G., Navare, A., Fernandez, F., Rodríguez, M.H., and Lanz, H. EMBO meeting on Molecular and Population Biology of Disease vectors Kolymbari, Crete, Greece.
24. Oral: Bacteriostatic activity in mosquito breeding sites. Hernandez-Martinez, S., Noriega, F.G., Navare, A., Fernandez, F., Rodríguez, M.H., and Lanz, H. XII Mexican Congress of Public Health Cuernavaca (Mexico).
25. Oral: Role of mosquito pericardial cells during the response against pathogens and malaria parasites. Hernandez-Martinez, S., Noriega, F.G., Navare, A., Fernandez, F., Rodríguez, M.H., and Lanz, H. VII Mexican Congress of Microscopy Acapulco (Mexico).

2006

26. Poster: Regulation of Juvenile Hormone synthesis in mosquitoes: physiological, biochemical and molecular studies. Hernandez-Martinez, S., Mayoral, J.G., Perez, M.H., and Noriega, F.G. Fifth International Symposium on Molecular Insect Science, Tucson, USA

27. Poster: Insect immunity: Role of mosquito pericardial cells during the response against pathogens and malaria parasites. Hernandez-Martinez, S., Noriega, F.G., Navare, A., Fernandez, F., Rodríguez, M.H. and Lanz, H. Fifth International Symposium on Molecular Insect Science, Tucson, USA.

2005

28. Oral Presentation: Mosquito pericardial cells constitute a cellular defense system against microorganism, including malaria parasites. Hernandez-Martinez, S., Noriega, F.G., Navare, A., Fernandez, F., Rodríguez, M.H., and Lanz, H. EMBO meeting on Molecular and Population Biology of Disease vectors, Kolymbari, Greece.

29. Oral Presentation: Regulation of juvenile hormone synthesis in mosquito: physiological, biochemical and molecular studies. Noriega, F.G. EMBO meeting on Molecular and Population Biology of Disease vectors, Kolymbari, Greece.

2004

30. Oral Presentation: Regulation of juvenile hormone synthesis in mosquito: physiological, biochemical and molecular studies. Noriega, F.G. Eight Juvenile Hormone Meeting, Lake Tahoe, USA.

31. Oral Presentation: Regulation of juvenile hormone synthesis in mosquito: physiological, biochemical and molecular studies. Noriega, F.G. XXII International meeting of Entomology, Brisbane, Australia.

32. Poster: Does the whitefly *Bemisia tabaci* (Gennadius, 1889) (Homoptera, Aleyrodidae) have digestive proteases? Mayoral, J.G, Noriega F.G., Alarcon, F.J., Martinez, T.F. and Barranco, P. XI Iberic Entomological Meeting, Madeira, Portugal.

33. Poster: Molecular evidence of proteases in *Bemisia tabaci* (Homoptera: Aleyrodidae). Mayoral, J.G, Noriega F.G., Alarcon, F.J., Martinez, T.F. Belda, E., Alcázar, M.D. and Barranco , P. Second European Whitefly symposium, Cavtat, Croatia

2003

34. Oral Presentation: Nutritional regulation of juvenile hormone synthesis in mosquitoes. Noriega, F.G. EMBO meeting on Molecular and Population Biology of Disease vectors, Kolymbari, Greece.

2002

35. Poster: Factors controlling the retention or elimination of protein meals by the midgut of *Aedes aegypti*. Caroci A.S. and Noriega, F.G. Fourth International Symposium on Molecular Insect Science, Tucson, USA.

36. Poster: Regulation of expression of digestive proteases in *Aedes aegypti*: a complex pattern with basic rules? Isoe, J., Noriega, F.G., and Wells, M.A. Fourth International Symposium on Molecular Insect Science, Tucson, USA.
37. Poster: Regulation of Juvenile hormone levels in mosquitoes. Li, Y. and Noriega. Fourth International Symposium on Molecular Insect Science, Tucson, USA.
38. Oral Presentation: Regulation of juvenile hormone levels in mosquitoes. Noriega, F.G. Asia and Oceania Society for. Comparative Endocrinology, Guangzhou, China.
39. Poster: Regulation of Juvenile hormone levels in mosquitoes. Li, Y. and Noriega, F.G. Gordon Research Conference on Hormones and Development, New London, USA

2000

40. Poster: Regulation of Juvenile hormone levels in mosquitoes. Noriega, F.G. XXI International meeting of Entomology, Foz do Iguazu, Brasil.
41. Poster: A molecular view of trypsin synthesis in mosquitoes. Noriega, F.G., and Wells, M.A. XXI International meeting of Entomology, Foz do Iguazu, Brasil.

1999

42. Oral Presentation: Nutritional regulation of juvenile hormone levels in mosquitoes. Noriega, F.G., Edgar, K. and Wells, M.A. Seventh Juvenile Hormone meeting, Jerusalem, Israel.
43. Oral Presentation: Recombinant juvenile hormone esterase, an effective tool to modify juvenile hormone dependent gene expression in mosquitoes. Edgar, K., Noriega, F.G., Bonning, B.C and Wells, M.A. Seventh Juvenile Hormone meeting, Jerusalem, Israel.

1998

44. Poster: Juvenile hormone and early trypsin transcription in *Aedes aegypti*: a model to study the molecular action of JH? Edgar, K.A., Noriega, F.G., and Wells, M.A. Third International Symposium on Molecular Insect Science, Snowbird, USA.
45. Poster: Juvenile hormone and early trypsin transcription in *Aedes aegypti*. Edgar, K.A., Noriega, F.G., and Wells, M.A. Keystone meeting on "Toward the Genetic Manipulation of Insects," Taos, USA.

1996

46. Poster: Regulation of expression of trypsin genes in mosquitoes. Noriega, F.G., and Wells, M.A. XX International meeting of Entomology, Firenze, Italy.
47. Poster: Regulation of expression of trypsin genes in mosquitoes. Noriega, F.G., and Wells, M.A. International Conference on Regulation of Insect Reproduction, Ceske Budejovice, Czech Republic.
48. Poster: Regulation of expression of trypsin genes in mosquitoes. Noriega, F.G., and Wells, M.A. American Society of Tropical Medicine and Hygiene, Baltimore, USA.

1995

49. Poster: Mosquito midgut trypsins: molecular basis of regulation by blood feeding Noriega, F.G., and Wells, M.A. Keystone Symposia on Insect Genetic Engineering, Tamaron USA

50. Poster: Mosquito midgut trypsins: molecular basis of regulation by blood feeding
Noriega, F.G., and Wells, M.A. Workshop of Biology of Parasite Vectors, Denver,
USA.

1993

51. Poster: Regulation of the early trypsin gene in *Aedes aegypti*. Noriega, F.G., Barillas,
C., and Wells, M.A. Second International Symposium on Molecular Insect Science,
Flagstaff, USA.
52. Poster: The presence of two trypsins allows the mosquito *Aedes aegypti* to assess the
quality of the blood meal and adjust the levels of trypsin required for digestion.
Barillas, C., Noriega, F.G., and Wells, M.A. Second International Symposium on
Molecular Insect Science, Flagstaff, USA.
53. Poster: Regulation of expression of trypsin genes in *Aedes aegypti*. Noriega, F.G.,
Barillas, C., Wang, X-Y and Wells, M.A. American Society of Tropical Medicine and
Hygiene, Atlanta, USA.

1992

54. Poster: Development of a rapid and effective protocol for the isolation of RNA to
study the regulation of expression of trypsin genes in *Aedes aegypti*. Noriega, F.G.,
and Wells, M.A. Workshop of Biology of Parasite Vectors, Santa Cruz, USA.

1991

55. Poster: Perfluorochemicals improve insect fat body culture oxygenation. Noriega,
F.G., and Wells, M.A. Second International Workshop on the Molecular Biology and
Molecular Genetics of Lepidoptera. Kolymbari, Greece.

1989

56. Poster: Ecdysteroid metabolism and titre in Triatominae. Noriega, F.G. IX Ecdysone
Workshop, Paris, France.

1987

57. Poster: Ecdysteroids: metabolism and hemolymph levels in fourth instar of *Triatoma
pallidipennis*. Noriega, F.G. International Symposium on Insect Physiology,
Biochemistry and Control, Rio de Janeiro, Brasil.
58. Poster: Autogeny in Triatominae. Noriega, F.G. International Symposium on Insect
Physiology, Biochemistry and Control, Rio de Janeiro, Brasil.

1986

59. Poster: Autogeny in Triatominae. Noriega, F.G. International Meeting on Chagas
Disease, Santiago del Estero, Argentina.

Current Research Projects:

The main line of research in my laboratory combines biochemistry, physiology and molecular biology to study two fundamental areas in mosquito biology: the neuroendocrine control of physiology and the molecular bases of nutrient sensing. In the last 15 years this project, funded by four consecutive RO1s from NIH/NIAID (2001-2020), has unveiled the basic role of juvenile hormone in the transduction of nutritional

signals and the regulation of reproduction in mosquitoes. This research project has secured \$7.143.547 in federal funds since arrived to FIU in 2004.

FUNDED RESEARCH

1. Title: Regulation of JH levels in mosquitoes
National Institute of Health. RO1 NIH grant award
PI: Fernando G. Noriega (FIU)
Total Cost: \$2.561.035.
Duration: 2015-2020.
2. Title: Regulation of JH levels in mosquitoes
National Institute of Health. RO1 NIH grant award
PI: Fernando G. Noriega (FIU)
Total Cost: \$ 2,452,997.
Duration: 2010-2015.
3. Title: Acquisition of a Fluorescent Microscope for imaging research on mosquito JH
National Institute of Health. grant award
PI: Fernando G. Noriega (FIU)
Total Cost: \$ 62.000.
Duration: 2010.
4. Title: Signaling pathways that regulate juvenile hormone synthesis in mosquitoes
National Institute of Health. F33 Award
PI: Marten J Edwards. Co-PI: Fernando G. Noriega (FIU)
Total Cost: \$59,402..
Duration: 2009-2010.
5. Title: Regulation of JH levels in mosquitoes
National Institute of Health. RO1 NIH grant award
PI: Fernando G. Noriega (FIU)
Total Cost: \$1,844,038.
Duration: 2005-2010.
6. Title: Identification and functional characterization of a new bacteriostatic factor in mosquitoes.
FIU Foundation, Faculty Research Award
PI: Fernando G. Noriega
Total Cost: \$23,265.
Duration: 2006-2007.
7. Title: Regulation of JH levels in mosquitoes
National Institute of Health. RO1 NIH grant award
PI: Fernando G. Noriega (University of Arizona and FIU)
Total Cost: \$ 888,399.
Duration: 2001-2005.
8. Title: Blood digestion in Vectors
National Institute of Health. RO1 NIH grant award
coPI: Fernando G. Noriega (University of Arizona)

Total Cost: \$1,237,432.

Duration: 1996-2001.

9. Title: Ecdysteroids titers and metabolism in Triatomine
Third World Association for the Advance of the Science (Trieste, Italy)
PI: Fernando G. Noriega (Univ. La Plata)
Total Cost: \$5000.
Duration: 1988.
10. Title: Thermoregulation in Cicadas.
Research Grant Award from S.P.I.D.E.R. (Ecological Research Development Program) University of Buenos Aires, Argentina
PI: Fernando G. Noriega (Univ of La Plata)
Total Cost: \$2000.
Duration: 1987.

PROFESSIONAL HONORS, PRIZES, FELLOWSHIPS

1. FIU CASE Research Award
2. Faculty Senate Research Award FIU 2016
3. FIU Top Scholar 2015
4. FIU Top Scholar 2012.
5. “100 latinos, first edition”. Selected as one of the 100 most prominent latinos in Miami (2010).
6. College of Arts and Science Summer Research Award, FIU 2005.
7. Distinguish Visiting Professor Award. Mexico-United States Foundation for Sciences. University of La Paz, Mexico (2001).
8. Visiting Professor Award, University of Stockholm, Sweden (1994).
9. Biomedical Research Abroad award (NIH), Visiting Professor. University of South Bohemia, Czech Republic (1994).
10. Fullbright Foundation Travel Grant Award. Argentina-USA (1989).
11. National Council of Scientific Research Post-Doctoral Fellowship (Argentina) (1989).
12. National Council of Scientific Research Training Fellowship (Argentina) (1987-1988).
13. National Council of Scientific Research Doctoral Fellowship (Argentina) (1984-1987).
14. National Council of Scientific Research Initiation Fellowship (Argentina) (1981-1983).

OTHER PROFESSIONAL ACTIVITIES AND PUBLIC SERVICE

1. Member Editorial Board. Insect Biochemistry and Molecular Biology (2010-present).
2. Permanent member NIH-NIAID Vector Biology review panel (2009-2015).
3. Editor in Chief. Open access Insect Physiology (2009-2012).
4. Ad-hoc member NSF Integrative Physiology review panel 2007-2009.
5. Ad-hoc member NIH-NIAID Vector Biology review panel 2005-2008.

Membership in Professional Societies

Entomological Society of America
Sociedad Entomologica Argentina
American Association for the Advancement of Sciences.

Review of papers

1. Proceedings of the National Academy of Sciences.
2. PLoS Biology.
3. PLoS One.
4. Journal of Bioenergetics and Biomembranes.
5. Biochimie.
6. J Comp. Physiol.
7. Molecular and Cell Endocrinology.
8. Open Parasitology.
9. Insect Biochemistry and Molecular Biology.
10. Gene
11. Journal of Thermal Biology.
12. Cell Tissue Research.
13. European J Entomology.
14. J Proteome Research.
15. Insect Molecular Biology.
16. Journal of Experimental Marine Biology and Ecology.
17. BMC Developmental Biology.
18. Cell and Tissue.
19. Journal of experimental Parasitology.
20. Journal of Insect Physiology.
21. Journal of Medical Entomology.
22. General and Comparative endocrinology.
23. Archives of Insect Biochemistry and Physiology.
24. Belgian Journal of Zoology.
25. Comparative Biochemistry and Physiology.
26. Journal of Vector Ecology.
27. Open access Insect Physiology.
28. Acta Tropica.

Review of Grants

1. National Science Foundation (USA).
2. National Institute of Health (USA).
3. French National Research Agency (France)
4. National Institute of Health (Mexico).
5. Wellcome Trust (UK).
6. National Council of Scientific Research (Argentina).

7. National Council of Scientific Research (Mexico).
8. Agencia Nacional de Promoción Científica y Tecnológica (Argentina).
9. Belgium Research Foundation (FWO)

Participation in Review Panels

1. Permanent member. National Institute of Health, NIAID, Vector Biology Study Section. (Appointed for the period 2009-2015).
2. Ad-hoc member NSF Integrative biology review panel (2007, 2009, 2016).
3. Ad-hoc Member. National Institute of Health, NIAID, Vector Biology Study Section. (2004, 2005, 2008).